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**DETERMINANTS OF INTENTION TO USE MOBILE BANKING IN
A PRIVATE BANK IN INDONESIA: A PERSPECTIVE FROM
TECHNOLOGY ACCEPTANCE MODEL**

By



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(Management)



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ABSTRACT

The mobile banking technology in Indonesia still in the growing stage. Even it is already available to the public since 2004, the adoption of the mobile banking is still far from 100% utilization. Based on the latest report from one private bank that becomes the pioneer in introducing mobile banking in Indonesia, their mobile banking channel adoption and usage showing an increasing trend from 2004 until 2018. However, the usage by customers to conduct transactions still below 40% even after 14-year progress with continuous update and revamp in features offered. Therefore, there is a need to examine the factors that affecting the intention to use mobile banking service. Technology acceptance model to assess the factors that influence intention to use a particular technology has widely used in past studies, many researchers also integrated other factors based on their need with TAM model which later become the extended technology acceptance model. The result in this research showed that the perceived usefulness and the trust propensity had the strongest relation and significant effect in influencing the intention to use mobile banking service, while perceived ease of use, social influence and individualism/collectivism culture aspect had no significant effect toward intention to use mobile banking services.

Keyword: Mobile Banking, Technology Acceptance Model, Intention to Use.

ABSTRAK

Teknologi perbankan mudah alih di Indonesia berada dalam fasa pertumbuhan, walaupun ianya telah disediakan untuk pengguna awam sejak tahun 2004 lagi. Perbankan mudah alih masih belum mencapai 100% penggunaan. Berdasarkan laporan terkini daripada salah satu bank persendirian yang menjadi perintis perbankan mudah alih di Indonesia, menyatakan bahawa terdapatnya peningkatan dalam penggunaan perbankan mudah alih sejak tahun 2004 sehingga tahun 2018, namun jumlah pelanggan yang menggunakan transaksi ini masih berada di bawah 40% walaupun setelah 14 tahun, dengan penambahbaikan dan pengemaskinian dalam ciri-ciri yang ditawarkan. Oleh itu, terdapat keperluan untuk mengkaji faktor-faktor yang mempengaruhi niat pengguna untuk menggunakan perbankan mudah alih. *Technology Acceptance Model* (TAM) adalah satu kaedah yang digunakan secara meluas dalam penyelidikan untuk menilai faktor yang mempengaruhi niat seseorang menggunakan teknologi tertentu. Terdapat ramai para penyelidik menggabungkan faktor lain ke dalam TAM berdasarkan kesesuaian dan kemudiannya menjadi model lanjutan kepada TAM. Hasil kajian ini menunjukkan bahawa faktor kecenderungan penggunaan dan kepercayaan mempunyai hubungkait yang kuat serta mempunyai kesan utama yang mempengaruhi niat dalam menggunakan perbankan mudah alih. Justeru itu, faktor memudahkan penggunaan, pengaruh sosial dan aspek kolektif budaya mempunyai hubungkait dan kesan terhadap perbankan mudah alih.

Keyword: Perbankan Mudah Alih, *Technology Acceptance Model*, Niat untuk Mengguna.

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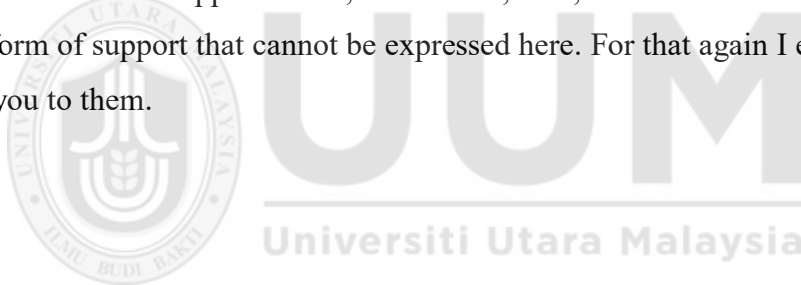


TABLE OF CONTENTS

CHAPTER ONE INTRODUCTION	1
1.0 Introduction	1
1.1 Background of study.....	2
1.2 Problem statement	7
1.3 Research question.....	10
1.4 Research objective.....	10
1.5 Scope of the study	11
1.6 Significance of the study	11
1.7 Definition of key terms.....	12
1.7.1 Behavioral intention.....	13
1.7.2 Perceived usefulness	13
1.7.3 Perceived ease of use	13
1.7.4 Social influence.....	14
1.7.5 Trust propensity	14
1.7.6 Culture.....	14
1.8 Organization of thesis.....	15
CHAPTER TWO LITERATURE REVIEW	17
2.0 Introduction	17
2.1 Overview of Bank Central Asia (BCA).....	17
2.2 Mobile banking.....	18
2.3 Perceived usefulness.....	20
2.4 Perceived ease of use.....	24
2.5 Social influence	30
2.6 Trust propensity.....	33
2.7 Culture	35
2.8 Behavioral intention	36
2.9 Underpinning theory.....	37
2.10 Conceptual framework.....	40
2.11 Research hypothesis.....	41
2.12 Chapter summary	42

CHAPTER THREE METHODOLOGY.....	43
3.0 Introduction	43
3.1 Population and sampling design.....	43
3.1.1 Target population	43
3.1.2 Sampling size	44
3.1.3 Sampling technique.....	46
3.1.4 Sampling location.....	46
3.2 Research design.....	46
3.3 Data collection method.....	47
3.3.1 Primary data	47
3.3.2 Secondary data	48
3.4 Research instruments.....	49
3.4.1 Construct measurement.....	49
3.4.2 Administration of questionnaire.....	51
3.5 Measurement of scale	51
3.6 Reliability analysis	52
3.7 Data analysis.....	53
3.7.1 Statistical methods	53
3.8 Descriptive analysis.....	54
3.9 Inferential analysis.....	54
3.9.1 Pearson correlation analysis	54
3.9.2 Multiple regression.....	55
3.10 Chapter summary	56
CHAPTER FOUR DATA ANALYSIS AND FINDING.....	57
4.0 Introduction	57
4.1 Background of respondent.....	57
4.2 Reliability analysis	60
4.3 Pearson correlation analysis	61
4.4 Multiple regression analysis	63
4.5 Hypothesis testing	64
4.6 Summary of hypothesis testing result.....	67
CHAPTER FIVE DISCUSSION AND CONCLUSION.....	69

5.0	Introduction	69
5.1	Discussion.....	69
5.2	Limitation for the study	74
5.3	Recommendation for future research	76
5.4	Conclusion.....	77
REFERENCES.....		79
Appendix A		84
Appendix B		92
Appendix C		98



LIST OF TABLE

Table 1.1.1 Banks offering mobile banking	5
Table 3.4.1 Structure of the questionnaire	50
Table 3.4.2 Five-point Likert scale	51
Table 3.6.1 Cronbach alpha classification	53
Table 3.9.1 Guilford (1973) rule of thumb	55
Table 4.1.1 Background of respondents.....	58
Table 4.2.1 Reliability test	60
Table 4.3.1 Pearson Correlation result.....	62
Table 4.4.1 Multiple regression result.....	64
Table 4.6.1 Summary of hypothesis based on regression analysis	67



LIST OF FIGURE

Figure 1.1.1 Asian banks in implementing mobile banking	4
Figure 2.9.1 Proposed technology acceptance model (1989)	37
Figure 2.9.2 Final technology acceptance model (1996)	39
Figure 2.10.1 Conceptual framework.....	41



CHAPTER ONE

INTRODUCTION

1.0 Introduction

Within banking industry, the financial institution has undergone many changes in term of delivering banking services like ATM, telephone banking, personal computer banking, and internet banking. These innovations affected by the rapid innovation in IT industry then adapted by the banking industry practice in order to meet the customer demand and also to compete within the banking industry. In the past decades, the emergence of smartphone and electronic commerce, the banking industry need to adapt with new wireless technology and new demand by customer that wanted more flexible yet accessible banking services from anywhere. Also, with the competitiveness within the banking industry, the need to provide different service for customer need to be addressed to survive in the competition. With widespread usage of smartphone and the mobile telcos providing data link (3G and 4G), it has become an opportunity for the banking industry to implement new service delivery channels. One of the favorable banking service channel is mobile banking service.

Cambridge dictionary define mobile banking as act of sending, receiving or managing money using mobile phones. On the other hand, Shaikh & Karjaluoto, (2015) define mobile banking as application that enable bank customers able to access bank accounts to check account status, transferring funds, paying bills or other payments, and managing stock. Another definition of mobile banking by Luo, Li, Zhang, & Shim, (2010) stated that mobile banking is an creative method in

accessing banking functions through mobile devices wherever the customers are located. To sum up from those definitions, it can be assumed that mobile banking providing bank customers the ability to access and use their banking account with their personal phones to conduct other banking activities like checking the funds, transferring funds, paying bills or other payment service, and managing stocks owned by the customers.

Mobile banking does not require customers to walk into the bank branches to conduct banking transaction. This become the advantage in users perspective as they can save cost of travelling to the bank branches or to the automated teller machine. They can perform the banking services during non office hours, and become more productive in managing time as they do not need to sacrifice time time in performing banking services compared to the traditional walk in service. The implementation of mobile banking also bring advantage to the banks. With the mobile banking features, banks have lower operating cost in term of processing the electronic funds compared to the traditional physical funds (Ashraf, 2012).

However, different banks provide different ways to deliver their mobile banking applications. The differences can come from the interface that affect the ease of use of the applications, the security method used in performing the transaction while some banks used the one time password code delivered in SMS in order to grant the transaction.

1.1 Background of study

Indonesian banking industry still undergoes positive business prospect with huge number population and the number of prospective consumers are also still high. The

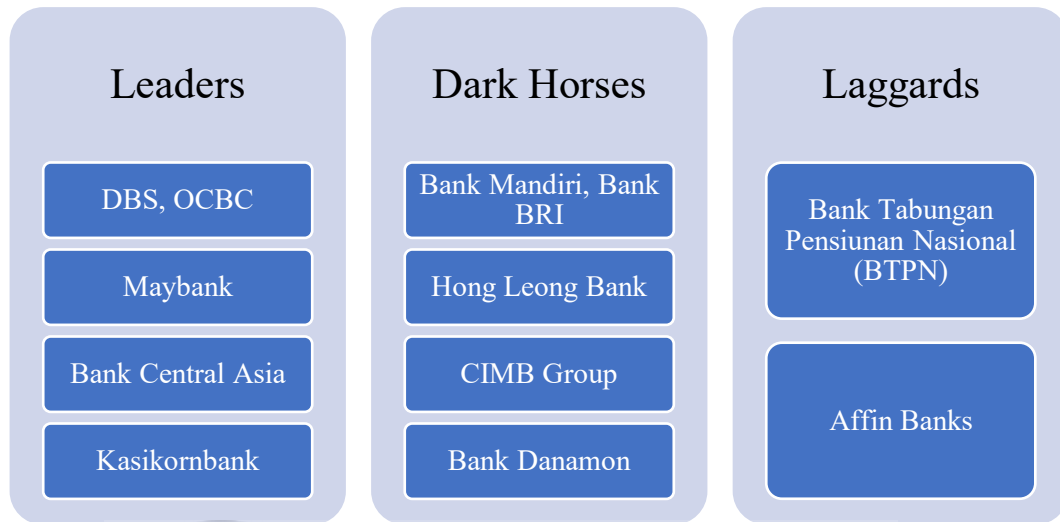
data from OJK (Otoritas Jasa Keuangan) shown banking inclusion in 2016 reached 67.82% this means 67% of the surveyed population already using banking services. However, banking literacy indicator is only 29.7% for the same period. This means only 29.7% of surveyed population know other products that banking services offer, banking products, investment options. The OJK as regulator teamed with banking institutions aim to achieve same goal which is to increase the banking inclusion rate targeted to 75% by 2019 and banking literacy rate to 35% by 2019 (Otoritas Jasa Keuangan, 2016).

Indonesian banking industry orientation has tried to move the conventional way of banking to virtual banking. The widespread use of smartphone in 2017 reached more than 124 million users (McKinsey, 2018) and the emerge of electronic commerce and digital financial technology (fintech) that compete with the banks in order to facilitate customers with payment system forced banking industry players need to catch up the digitalization of their services (PricewaterhouseCooper Indonesia, 2018).

In Southeast Asia the first adopter of mobile banking started by the Singapore banks followed by Malaysia banks then Indonesian banks, Thailand banks, and Philipphines banks. The penetration rate is different among banks and countries. Table 1.1.1 showed the categories of bank from different countries in Asia implementing mobile banking services. While one bank from Indonesia considered as leader in bringing new innovations to Indonesia, Indonesia is still known for the underbanked population. Some portion of population that who are not financial

literate, they prefer to use conventional way in conducting banking activities and hesitant to adopt new technologies for their banking needs.

Figure 1.1.1 Asian banks in implementing mobile banking



Source: DBS Bank, (2015)

Mobile banking in Indonesia is still considered in the growing phase. Since its introduction phase in 2004, mobile banking users can only do very limited banking services compared to the internet banking services. The first mobile banking service is only able to check the fund only. To obtain more function of mobile banking, the users need to request a special SIM (*subscriber identity module*) card that is able to perform mobile banking from the telco providers. The first bank that offer mobile banking feature in Indonesia was Bank Central Asia in September 2004. it is followed by the other banks such as Bank Mandiri and Bank Rakyat Indonesia.

Table 1.1.2 showed banks in Indonesia that offer mobile banking services. The list is arranged based on the asset valuation. Based on the table below, eleven out of 85 local banks that operates in Indonesia and offered mobile banking delivery channel

and eleven banks are major local banks that in total has more than 60% of national banking asset. Six foreign banks that also provide mobile banking services in Indonesia to deliver their services.

Table 1.1.1 Banks offering mobile banking

	Local Banks	Foreign Banks
Mobile Banking	Bank Rakyat Indonesia (BRI)	Maybank
	Bank Mandiri	Citibank
	Bank Central Asia (BCA)	HSBC
	Bank Negara Indonesia (BNI)	Commonwealth
	Bank Tabungan Negara (BTN)	OCBC NISP
	Bank CIMB Niaga	Standard Chartered
	Bank Panin	
	Bank Danamon	
	Bank Permata	
	Bank Mega	
	Bank Muamalat	

Source: Zakky, (2019)

After the big banks in indonesia had launched the mobile banking services in 2004 and with the widespread usage of mobile devices the adoption of mobile banking starting to progress. However, the adoption rate suffered the slow growth below 10% especially before 2014 (PricewaterhouseCooper Indonesia, 2018). Based on reports from Otoritas Jasa Keuangan, (2017) the knowledge of mobile banking delivery channel in 2016 had only reach 12% from surveyed bank consumers across Indonesia. Apart from the slow adoption rate, mobile banking providers made various improvement and add more banking capabilities in their mobile banking applications in order to attract more users to use these banking delivery channel.

Based on the PricewaterhouseCooper Indonesia, (2018), smartphone users almost reached 70 million users in 2016 and 124 million in 2017 (McKinsey, 2018). The

increase of smartphone adoption, the widespread implementation of 4G long term evolution wireless technology and the emergence of e-commerce and fintech that integrating payment service the adoption of mobile banking started to increase.

Another reason that make the adoption of mobile banking higher is the Indonesian government implementing plan for cashless society. Started with the cashless payment in highways, the implementation of Indonesian central bank constitution No.20/6/PBI/2018 by Indonesian central bank regarding the rules and permits for developing electronic wallet for payments. Thus, with the support of the government in creating cashless society, the bank electronic channels especially mobile banking adoption will be accelerated.

However, the mobile banking services in Indonesia still has long way to go to fully utilized by the majority of banking customers. As the segment of banking customers are still considered to rely their banking services with walk in to branch and using ATM to perform transfers or other services (Rema & Setyohadi, 2016; Fadlan & Dewantara, 2018; Rahayu, 2015). This also supported by (McKinsey, 2019) which stated four out of five respondents choosing a bank based on convenience location of the branch and the availability of ATM not mainly because the digital delivery channels offered also, the respondent is ready to adapt to digital banking but the security concern and complexities to understand the usage of the digital banking inhibit the intention to use mobile banking (Shareef, *et. al.*, 2018). Therefore, this research intends to seek insight regarding the determinants of intention to use mobile banking in a private bank in Indonesia.

1.2 Problem statement

Nowadays, technology has become human everyday life companion. The service sector took the opportunity to harvest their advantages to serve the customers especially the banking sectors. Banks gradually introduced the electronic channel to deliver their services in order to offer more choices for the consumers also as differentiator with other banks as competitiveness point and at the same time these technologies also reduce the operating cost for the bank (Ashraf, 2012). The introduction of electronic channel banking by the Indonesian banks help customers to do more flexible banking services using their devices anywhere and anytime.

Mobile banking in Indonesia is still considered new compared to internet banking and phone banking which were introduced earlier and still has long way for development and improvement. The latest national survey report from Otoritas Jasa Keuangan (OJK) in 2016 about financial inclusion index, it specified that majority of the banking consumers (86.6%) still depend on walk in services to bank branches and (73.5%) walk to the nearest automated teller machine (ATM) while only 4.6% of them choose the mobile banking as their banking delivery channel. Latest data from Bank Central Asia (BCA) company report in 2018, only 30.3% transaction conducted through mobile banking with value of transaction comprise of only 5% from total value transaction. With that figures it showed that mobile banking in Indonesia is still underutilized even in the banks who become leaders brought the innovation since 2004. The rate of utilization still below internet banking and ATM until 2018. Thus it would be interesting to examine the determinants affecting the intention to use mobile banking service by the banking customers in performing their banking activities.

There are significant amount of past literature that examine the intention to use mobile banking using technology acceptance model (TAM) as their theoretical basis. Technology acceptance model introduced in 1989 by Davis, Bagozzi, & Warshaw in order to modelling the innovations acceptance behavior. It is regarded as a solid, parsimonious model to predict the user innovation acceptance behavior (Munoz-Leiva, *et. al.*, 2017). TAM was developed after the theory of reasoned action (TRA) conceived by Fishbein and Azjen in 1975 for sociological and psychological researchers (Taherdoost, 2018).

Furthermore with the wide use TAM in exploring the acceptance behavior, the theory also been extended to accommodate another aspect influencing the technology acceptance like Kumar, Lall, & Mane, (2017) proposing extended technology acceptance model by integrating the social influence and trust propensity aspect in examining intention to use mobile banking in India which resulted that perceived usefulness, perceived ease of use, social influence and trust propensity give positive and significant effect to the intention to use mobile banking. In order to improve the intention to use mobile banking services, the banks need to focus to improve its usefulness, ease of use aspect, social influence and perceived trust need to be examined so the satisfied users will influencing others to adopt the mobile banking.

Munoz-Leiva, *et. al.*, (2017) in their research explored adoption of mobile banking in Europe has not increased as expected. Therefore, they using extension of TAM model in order to examine what factors that precedeed of intention to use mobile banking among European banks customers. Their results aligned with other

previous research where ease of use had exert positive effect on intention to use mobile banking apps.

Research by Mortimer, *et. al.*, (2015) examining the motivators that affect consumers intention to use mobile banking in cross culture context using Australia and Thailand in their research. They used TAM variables as base model and integrating the national culture as differentiator between two countries. The results show differences in culture affect the significance of some variables like perceived ease of use had showed insignificant results in Australia where this variable lean forward to be significant in Thailand in affecting intention to use. Another variable is social influence does not play significant role in Thailand in other hand, it has significant impact on intention to use mobile banking in Australia.

In line with previous literature that integrating culture, another researcher conduct study that assess the effect of country culture dimension in the adoption of the Brazilian mobile banking services (Goularte & Zilber, 2018). The researcher integrated five Hofstede cultural dimensions but the results showed that only individual/collectivism and long/short orientation dimensions have weak significance effect on behavioral intention while other three dimensions showed insignificant effect on the intention to use mobile banking in Brazil.

To sum up, based on actual report regarding underutilized mobile banking facility in Indonesia from private banking report, also some previous research that also examining it in the other countries, the main purpose of this research is to examine the influence of perceived usefulness, perceived ease of use, social influence, trust propensity and individualism/collectivism culture dimension toward intention to

use mobile banking among banking customers. This research explores the relationship of the determinants based in technology acceptance model that extended and their implication toward intention to use (behavioural intention) of mobile banking services.

1.3 Research question

The researcher focused on what is the relationship and the effect of extended technology acceptance variables along with culture dimension toward the intention to use mobile banking facilities among the banking employee as consumers. The research questions elaborated below:

- I. What is the relation and effect between extended technology acceptance model variables (perceived usefulness, perceived ease of use, trust propensity and social influence) with the intention to use mobile banking facilities?
- II. What is the relation and effect between collectivism of culture dimension on the intention to use mobile banking facilities among banking employee as consumers?

1.4 Research objective

The main research objective is to understand the relationship and the effect of extended technology acceptance variables along with culture toward the intention to use mobile banking facility among the banking employee as consumers of Bank Central Asia region in Medan city. Research objectives are provided below:

- I. To examine the relation and effect between extended technological acceptance model variables (perceived usefulness, perceived ease of use,

trust propensity and social influence) on the intention to use mobile banking facility among banking employee as consumers.

- II. To examine the relation and effect between collectivism culture on intention to use mobile banking facility among banking employee as consumers.

1.5 Scope of the study

Based on research objectives, this study focused on examining the determinants that influence the intention to use mobile banking among banking employee of Bank Central Asia branch Medan city. This study using five variables which is perceived usefulness, perceived ease of use, trust propensity, social influence and individualism/collectivism culture. This research examining the variables relationship and effect toward intention to use mobile banking among banking employee.

1.6 Significance of the study

In today fast-paced world the usage of technology become more integrated to human life. The advance of technology will affect how human and business interaction including banking industry. The usage of better technology will improve bank expenses, the adoption of internet and mobile banking as delivery channel could resulting lower expenses in conducting transactions compared to branch and ATM transactions (Ashraf, 2012). In consumer side, the availability of these technology also reduces the cost of travel to the bank branch and more flexible to access some banking services.

This study examines the determinants that influencing the intention to use mobile banking using extended technology acceptance model as basis. The outcome from this study expected to contribute to the body of knowledge and banking institution in Indonesia. The fact that mobile banking already introduced since 2004 in Indonesia. In 2018, it is still underutilized made it is interesting to be examined and the findings from this study may give updated ideas and recommendations to the banking industry players what aspects that affect the intention of banking consumers to use mobile banking.

This research was done in a specific group of population which is the employees of Bank Central Asia branch Medan city as banking consumers. The researcher chooses branch Medan city because after some interview with some employee they expressed some culture in the branch Medan city a bit different compared to other branch. This aligned with the research that try examining the collectivism culture factor influence toward intention to use mobile banking facility. The researcher expects the results of this research able to contribute to the body of knowledge as the future guideline or references to other researchers that conduct study in the same area. For the company, the result from this study might give insights to the management department like marketing, and product development at least to optimize the adoption rate of the mobile banking which in this research specific to Bank Central Asia (BCA).

1.7 Definition of key terms

This study uses five independent variables which are perceived usefulness, perceived ease of use, social influence, trust propensity and culture. The research examines the relation of the five variables toward intention to use mobile banking

(behavioral intention) as dependent variable. As the definition for each variable can be many, in this study, definition used for each variable specified as follow:

1.7.1 Behavioral intention

Conceptual definition: Ajzen (2005) define behavioral intention as an intention of someone to try performing a certain behavior. Fishbein & Ajzen, (1975) depict it as the function of both attitude and subjective norm toward behavior and later will predict the actual behavior.

Operational definition: In this research context, behavioral intention referred as intention to use mobile banking among the banking employees as consumers, intention to use mobile banking measure the banking employees as consumers behavior intention to use the mobile banking facility.

1.7.2 Perceived usefulness

Conceptual definition: Davis, Bagozzi, & Warshaw, (1989) indicate perceived usefulness as prospective user's subjective chances regarding the specific application or system that may improve their job performance.

Operational definition: In this research context, perceived usefulness is about the subjective quantification usefulness of the mobile banking from the prospective of users, which in this case is employees Bank Central Asia branch Medan.

1.7.3 Perceived ease of use

Conceptual definition: Davis, Bagozzi, & Warshaw, (1989) describe perceived ease of use as the extent of prospective user expectation in using that system of application will require less or free of effort.

Operational definition: In this research context, perceived ease of use is about the subjective quantification ease of use of the mobile banking from the prospective or users, which in this case is employees Bank Central Asia branch Medan.

1.7.4 Social influence

Conceptual definition: Venkatesh & Davis, (2000) referring from Deutsch, Gerard 1955 conceived social influence as the influence from other to someone to take the information as proof about reality.

Operational definition: In this research context, social influence means that influence or suggestion to use a system or application from other might affect someone to believe the same way regarding a system or application and in turn resulting an intention to use it.

1.7.5 Trust propensity

Conceptual definition: Trust propensity can be described as representation of a person nature to rely on others in any situation. When a person makes a judgment to a service before knows it, those with higher trust propensity tend to believe the service can be reliable.

Operational definition: In this research context, trust propensity is about the trust of the users which is employees Bank Central Asia branch Medan to the mobile banking facility offered by the company.

1.7.6 Culture

Conceptual definition: (Goularte & Zilber, 2018) defined culture as a set of values and belief that instill on how people think, feel, act and also influence how people behave. Collectivism culture defined as societies that has strong cohesive in-groups,

which means the ties between individual are tight (Hofstede, Hofstede, & Minkov, 2010).

Operational definition: In this research context, only collectivism culture aspect is integrated because collectivism culture may affect how individuals accepting the new technology which in this study is mobile banking.

1.8 Organization of thesis

This research report consisting five chapters. Which is introduction, literature review, methodology, data analysis with findings, also the last part is discussion and conclusion. The contents for each chapter is described as follow.

Chapter one, elaborating generally the research, the research problem, the research question and objective, also the scope and significance of this study along with its limitation.

Chapter two, exhibit the past literature that relate to the subject of this study. It also provides more understanding to the construct of the chosen variables that used in this research. In this chapter intention to use (behavioral intention) become the dependent variable while perceived usefulness, perceived ease of use, social influence, trust propensity and culture as independent variables.

Chapter three showed the methodology used in this study. This chapter also elaborate the procedure in sampling size determination, procedure used to collect the data, instrument used and method how the data analyzed.

Chapter four represented the data analysis based on methodology described on previous chapter. It consists of descriptive analysis, reliability analysis, inferential analysis. All the analysis conducted on a statistical software.

Chapter five consisting the findings, discussion and summary after data been analyzed from previous chapter. This chapter elaborated the result and the justification to support it. Also, in this chapter described the limitation of this study and recommendation for next study also some insight for the company.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Chapter two consisted of the past literature that related to the research topic, and the theoretical framework that used for the study. The overview of the Bank Central Asia also included to get better insight about the company. Variables that used on this study consist of perceived usefulness, perceived ease of use, social influence, trust propensity and individualism/collectivism culture, these variables act as independent variable and for the dependent variable is behavioral intention which is intention to use. In this chapter also presented the conceptual framework and the research hypothesis.

2.1 Overview of Bank Central Asia (BCA)

According to ErnstYoung (2017), The banking sector in Indonesia is dominated by state-owned banks, but in big three dominator there is one private local bank that also filling the third position which is PT. Bank Central Asia Tbk. (BCA). BCA is the one of domestic private bank that have big asset bigger than 600 trillion rupiah (USD 42.889 billion) in the same time there is no other domestic private bank can achieve such competitiveness. Based on the assets ranking, position 1,2,4 and 5 occupied by state owned bank which is BRI, Mandiri, BNI, BTN while on number 3 occupied by BCA. The success of the BCA is not achieved in five or ten years, BCA already exist in Indonesia since 1955 and commenced operation since 1957 and in 2018 already given 63 years banking service to its customers with 24.941 employees the company manage to strengthen its brand in the market by its service and product offered.

Banking industry nowadays to be compete need to adapt with the demand of the generations that will use the service and technological change, in this case is millenials generation. In order to stay competent and ahead in market BCA developing more digital lounge and educate consumer to use electronic channel. That way BCA encouraging customer shifting from conventional way in banking by coming to the office toward using the electronic channel like internet banking and mobile banking and other electronic banking services (e-banking).

In banking business the banking products that are offered to customers are almost identical between banks. The differentiator is how to deliver the products and rate offered. With Current banking business that is very dynamic, competitive and almost homogenous. To get ahead in competition banks must offer something different from the other banks in order to attract and maintain customers.

2.2 Mobile banking

Zhou, Lu, & Wang, (2010) defined mobile banking as mobile phone banking, the usage of mobile terminal like mobile phone or cell phone and personal digital assistant (PDA) to conduct banking activity through wireless application protocol. Through mobile banking, users can conduct banking services like account checking and management, transfer and bill payment. The differences of mobile banking with other electronic banking like internet banking is the users have less limitation and hassle in conducting banking service as they not need to bring a laptop or seek internet connection.

Mobile banking service technology was first introduced to public in 1990s in Germany and spread across Europe including United Kingdom. In the early phase

of mobile banking introduction in Indonesia, there are two ways to access the mobile banking which is using text services (SMS) and the other one is through SIM (subscriber identity module) menu which need to replace to a special SIM card that already has the mobile banking menu both connected through mobile operator coverage. Text based mobile banking service at that time is a bit complicated and user need to have a special instruction send to special number to conduct mobile banking. The other way is using the M-banking menu that is embedded on the SIM card. M-banking menu is easier to use because user just need to navigate to the command desired such as balance check, fund transfer and other services. However, the functions are still limited.

Blackberry, iOS and android phone emerge, banks developed special mobile banking apps that can be downloaded and installed to the mobile devices. The basic function almost alike when using SIM card M-banking menu but with better interface and more functions are available, the connection method is also shifting, using the internet data instead of using the SMS. To subscribe this service, user need to activate the mobile banking service in the ATM or in bank branches to register the phone number. The security is based on the personal identification number (PIN) number that user set after installing the app and some banks used double security, BCA is using two steps PIN which is one asked when logging in to the app and one asked every transaction or command will be executed. The functions offered with today mobile banking start from balance check, account history(real time), mutual funds check and management, transfer now with option to the same bank or other bank, m-payment that consisting payment for credit card,

phone bill, utilities, insurance and loan payments, m-commerce options that offer purchasing top up credit and other voucher.

2.3 Perceived usefulness

Perceived usefulness is depicted as prospective user's subjective expectation regarding the specific application or system will improve their job performance (Davis, Bagozzi, & Warshaw, 1989). The aspect of perceived usefulness in adoption of particular system in job environment is expected to enhance person the job performance by increasing their effectiveness and performance (Davis, 1986). Based on Davis final TAM model in 1996, perceived usefulness had significant effect toward intention to use (behavioral intention). Prior literature shows that perceived usefulness had consistent positive relation and effect on intention to use specifically in technology acceptance model (TAM) (Alalwan, *et. al.*, 2018; Giovanis, *et. al.*, 2018; Siyal, Ding, & Siyal, 2018; Gumussoy, Kaya, & Ozlu, 2017; Kumar, Lall, & Mane, 2017; Alalwan, *et. al.*, 2016; Bhardwaj & Aggarwal, 2016; Bashir & Madhavaiah, 2015; Mortimer, *et. al.*, 2015; Shaikh & Karjaluoto, 2015; Kazi & Mannan, 2013).

According to Alalwan, *et. al.*, (2018) in their study on intention to adopt mobile banking in Saudi Arabia, the researcher used an extended TAM as theoretical base. The method used to collect data using convenience sampling and data acquired from 357 respondents and analyzed using structural equation modelling (SEM). Results showed that perceived usefulness possess significant impact on intention to adopt. Perceived usefulness significant effect toward intention to adopt mobile banking provide result is as expected, because using mobile services may provide

customers with more benefit like higher degree of mobility using the service also more convenience and efficient (Alalwan, *et. al.*, 2018).

Siyal, Ding, & Siyal, (2018) conducted a study about mobile banking barrier in Pakistan from customer perspective of adoption and continuity intention. The researchers used extended TAM as framework of the study adding variables outside TAM model based on research needs. For data collection and method for analysis, researcher attained 200 responses from customers of 5 banks across 7 urban areas in Pakistan. The data was analyzed using structural equation modelling (SEM). Results unveil that perceived usefulness has positive effect in determining intention to adopt mobile banking. The supporting reason is bank consumers are more attracted to the technologies that perceived useful and suited to their needs, the advantage offered by mobile banking was enough to attract them to use it continuously.

Inline with previous study, research conducted by Gumussoy, Kaya, & Ozlu, (2017) in Turkey about the determinants of mobile banking use using the extended TAM. The research collected 220 questionnaires from respondents and analyze using stepwise multiple regression. From data analysis, its depicted perceived usefulness has a significant impact toward behavioral intention. This research showed perceived usefulness possessed the most powerful construct that directly affect behavioral intention to use mobile banking. The reason for this while users found out mobile banking is useful, easy, enhancing their performance and efficiency, they will use it frequently (Gumussoy, Kaya, & Ozlu, 2017).

Kumar, Lall, & Mane, (2017) in their research about intention of postgraduate students to use mobile banking that conducted in India. The research using extended TAM model with a sample 144 postgraduate student. This research showed perceived usefulness exhibits positive and significant effect toward intention to use mobile banking and aligned with other previous literature. Young users showed that useful aspect of the technology on their life made them want to adopt it and supported by the emergence of the smartphone, they are more familiar with IT made them tend to test different delivery channels offered by the bank such as mobile banking (Kumar, Lall, & Mane, 2017).

Alalwan, *et. al.*, (2016) also conduct the research about consumers adoption of mobile banking in Jordan. Using TAM as conceptual base, one of the goal is to examining the role of perceived usefulness toward behavioral intention to use mobile banking. Data collected through self administered questionnaire that distributed and sample of 500 banking customers in two main city in Jordan and 343 returned. The data was analyzed with structural equation modelling (SEM). The results showed that perceived usefulness as a key factor determining behavioral intention of mobile banking adoption. The rationale of this result with the benefit offered by mobile banking such as ability to access the banking service without time and place restriction, Jordanian banking customers eager to adopt as they perceive mobile banking will give them more effective, productive and useful technology in daily usage (Alalwan, *et. al.*, 2016).

A research by Bhardwaj & Aggarwal, (2016) examining mobile banking adoption by young generation in India also exhibit the same results. The literature showed

the positive effect of perceived usefulness toward intention to use mobile banking. However, in this research, it showed the weak influence. This difference may happen because the respondents not aware of the services or lack information how to use it appropriately. The lack of knowledge or information on users may lead to less desire to adopting the mobile banking.

Mortimer, *et. al.*, (2015), researcher investigated determinants that influencing the adoption of mobile banking in a cross culture study between Australia and Thailand. The main theory construct used the extended TAM for both country. Data collected through questionnaire and 348 data used for analysis which consist 173 from Australia and 175 from Thailand. The data analyzed by EFA and CFA using AMOS. Perceived usefulness in this research from both country exhibited positive effect toward intention to use mobile banking. According to Toh *et. al.*, (2009) (as stated in Mortimer, *et. al.*, 2015), the unique characteristics possessed by the mobile banking which is ubiquity and immediacy compared by other self service technologies made it more useful for users in conducting banking services. The advantages offered for usefulness users motivate to adopt mobile banking service.

Kazi & Mannan, (2013) conducted research regarding factors affecting adoption of mobile banking in Pakistan based on empirical evidence. The research construct using extended TAM model and aiming for low income population intention to adopt mobile banking. 372 responses were analyzed with correlation and multiple regression method. The results showed that perceived usefulness has positive and significant relation toward intention to adopt mobile banking among low-income sector in Pakistan. In consistent with other studies if mobile banking can beneficial

to users like able to manage account with effectively, efficiently, and conveniently everywhere and in any time, it will increase the probability intention to adopt mobile banking (Kazi & Mannan, 2013).

Gu, Lee, & Suh, (2009) studied the determinants of intention to use mobile banking in Korea. Researcher used extended TAM as research model. Researchers collaborating the research with Wooribank in order to get response from users. Researchers developed web questionnaire that appears in Wooribank website and aiming for the users that already using mobile banking. After gathered 910 responses, data were analyzed with structural equation model (SEM) in AMOS. The results showed that perceived usefulness appears as the important construct in determining behavioral intention in mobile banking. It showed that users want to use mobile banking because they had experienced it to be useful to conduct their banking activities.

2.4 Perceived ease of use

Perceived ease of use depicted by Davis, Bagozzi, & Warshaw, (1989) as the extent of prospective user expectation in using that system or application will require less or free of effort. In term of a new technology arises the users need to adapt and seek information to utilize it. In order to use it effectively, efficiently and safely users need to have certain experience or knowledge (Alalwan, *et. al.*, 2018). Regarding the perceived ease of use aspect in TAM there are many studies that showed positive and significant in determining behavioral intention to use a specific technology system (Gumussoy, Kaya, & Ozlu, 2017; Kumar, Lall, & Mane, 2017; Alalwan, *et. al.*, 2016; Bhardwaj & Aggarwal, 2016; Mortimer, *et. al.*, 2015; Shaikh & Karjaluoto, 2015; Kazi & Mannan, 2013). However, there are limited literatures

that also exhibit perceived ease of use that show insignificant effect on behavioral intention using TAM model (Alalwan, *et. al.*, 2018; Tsai, *et. al.*, 2017; Yadav, Sharma, & Tarhini, 2016; Mortimer, *et. al.*, 2015; Kesharwani & Bisht, 2012; Koenig-Lewis, Palmer, & Moll, 2010; Wessels & Drennan, 2010; Lopez-Nicolas, Molina-Castillo, & Bouwman, 2008; Constantinou, Damsgaard, & Lars, 2006; Venkatesh & Davis, 2000).

A research conducted by Gumussoy, Kaya, & Ozlu, (2017) in Turkey examined the determinants of mobile banking use using the extended TAM. The research collected 220 questionnaire from respondents and analyze using stepwise multiple regression. From data analysis it is found that perceived ease of use possessed significant effect on behavioral intention. The banks need to take into account the ease of use aspect of mobile banking by gave more advertisement that using mobile banking is simple. Banks need to adjust the how to use the mobile banking with the user lifestyle and personal preferences to enhance users intention to adopt mobile banking (Gumussoy, Kaya, & Ozlu, 2017).

In line with previous literature, Kumar, Lall, & Mane, (2017) studied about intention of postgraduate student to use mobile banking conducted in India studied about intention to use mobile banking among educated youth. The research using extended TAM model with a sample 144 postgraduate students. In this study perceived ease of use exhibit the positive and significant impact on the intention to use mobile banking is aligned with other previous literature. With the ease of use aspect affect significantly influence the intention to adopt mobile banking, banks need to develop their mobile banking application to be less complicated and simple

in attempt to increase the intention to adopt among of youth generation in India (Kumar, Lall, & Mane, 2017).

Alalwan, *et. al.*, (2016) also conduct the research about consumer adoption of mobile banking in Jordan. Using TAM as conceptual model, one of the goal on this research is to examining the role of perceived usefulness toward behavioral intention to use mobile banking. Data collected through self-administered questionnaire that distributed to convenience sample of 500 banking customer in two main city in Jordan and 343 returned. Then the data analyzed with structural equation modelling (SEM). The findings proved that perceived ease of use exert positive and significant effect towards intention to adopt mobile banking, the rationale of this result was the user will have increase intention to adopt mobile banking if user feel that mobile banking is simple to operate and requiring less effort to use it(Alalwan, *et. al.*, 2016).

A research by Bhardwaj & Aggarwal, (2016) on mobile banking adoption by young generation in India also exhibit the same result as other literature regarding the positive effect of perceived ease of use toward intention to use mobile banking. While ease of use increase, the users intention to adopt mobile banking will increase because the users feel the mobile banking is simple to understand they will likely to adopt it as they need not have to put extra effort for it (Bhardwaj & Aggarwal, 2016).

Research by Mortimer, *et. al.*, (2015), studied the factors that influencing the adoption of mobile banking between Australia and Thailand. The main theory construct used the extended TAM for both country. Data collected through

questionnaire and 348 responses were used for analysis which consist 173 from Australia and 175 from Thailand. The data analyzed using structural equation modelling. Perceived ease of use in Thailand exhibited positive and significant effect toward intention to use mobile banking.

Kazi & Mannan, (2013) conducted research to identify factors that impacted the adoption of mobile banking in Pakistan. The research constructs using extended TAM model and aiming for low income populations intention to adopt mobile banking. 372 responses were analyzed using correlation and multiple regression. The findings showed perceived ease of use has positive significant relation toward intention to adopt mobile banking among low-income sector in Pakistan, in line with other studies, mobile banking that offers users friendly usage and no need for higher skill to operate, it will increase the probability to adopt mobile banking for potential adopters (Kazi & Mannan, 2013).

Gu, Lee, & Suh, (2009) studied the determinants of intention to use mobile banking in Korea. They used extended technology acceptance model as ground theory. To gather the data researchers collaborating the research with Wooribank in order to get responses from users. Researcher developed web questionnaire that appears in Wooribank website aiming for the users that are already using mobile banking. After gathered 910 responses, data analyzed with structural equation model (SEM) in AMOS. Findings showed perceived ease of use has positive and significant effect toward behavioral intention to use mobile banking. It showed that users are willing to utilize mobile banking because they find it user friendly and comfortable to use (Gu, Lee, & Suh, 2009).

Alalwan, *et. al.*, (2018) who studied intention to adopt mobile banking in Saudi Arabia with extended TAM as theoretical base. The method used to collect data using convenience sampling and 357 data sets from respondents were analyzed using structural equation modelling. Results showed that perceived ease of use, exhibit insignificant effect toward intention to adopt mobile banking. Tsai, Wang, Yan, & Chang, (2017) in their research about user intention to use store apps that integrate internet of thing (IoT) in mobile commerce. Based on extension TAM model that exhibited perceived ease of use do not exert significant impact toward intention to adopt the apps for mobile commerce that integrating IoT. The rationale behind this because user felt that users interface of the app is not intuitive, difficult to operate and not easy to understand (Tsai, Wang, Yan, & Chang, 2017).

Yadav, Sharma, & Tarhini, (2016) in their research that examine the factors that predict the intention to adopt mobile commerce using extended TAM model at their research framework. The data collected from postgraduate students in Delhi Technological University and Delhi University, 213 data sets were gathered and analyzed. The analysis used structural equation modelling and neural network modelling. The result showed perceived ease of use does not have significant relationship toward customer intention to adopt mobile commerce. The explanation for this result is that the youth respondent are already familiar with the smartphone usage. They are comfortable to adopt new technologies. Therefore, they do not experience difficulties to use new technologies (Yadav, Sharma, & Tarhini, 2016).

Research by Mortimer, *et. al.*, (2015), examined the factors that affect the adoption of mobile banking in a cross culture, between Australia and Thailand. The main

theory construct used the extended TAM for both country. The result of this study showed perceived ease of use in Australia does not significantly affect intention to use mobile banking. Inline with previous research, the most of Australians were familiarized with the usage of the smartphone and made them more proficient when using the mobile application such as mobile banking (Mortimer, *et. al.*, 2015).

Another literature by Kesharwani & Bisht, (2012) exploring the extended TAM model integrating effect of trust and perceived risk on internet banking adoption in India. As theoretical ground the researcher utilize the extended TAM model. Researcher used questionnaires for data collection targeting postgraduate students in a premier business school in India that use internet banking services. In total, 619 responses are available for analyzed using structural equation modelling. The result for the perceived ease of use aspect exhibited insignificant relation toward intention to use internet banking.

That results also consistent with Koenig-Lewis, Palmer, & Moll, (2010) in their study about intention of young consumers to utilize mobile banking in Germany. The results showed insignificant result of perceived ease of use toward intention to utilize mobile banking. The possible reason to support the result can be based on Venkatesh and Davis (2000) (as cited in Koenig-Lewis, Palmer, & Moll, 2010) that ease of use has lesser impact compared to usefulness because ease of use aspect affect intention to use from usefulness aspect. According to Wessels & Drennan, (2010), perceived ease of use was insignificant toward intention to use mobile banking can be related to the consumers confidence in their ability to study how to

utilize mobile banking services as they are already experience with mobile phone and other mobile applications.

2.5 Social influence

Fishbein and Ajzen (1975) (as cited in Yadav, Sharma, & Tarhini, 2016) defined social influence as the degree of individual user perception is inclined by the belief from others who matter to the person regarding the use of an innovation. Some people tend to rely on inner circle to convince whether they should adopt or use a technology especially newer innovation on technology. If their inner circle can convince or at least persuade to use the technology, the user perception to adopt or intention to use will increase. Fishbein and Ajzen (1975) in their study also assume that subjective norm defined from normative belief that came from society and culture and might influence the intention rather than behavior directly. That is the reason it is more appropriate that social norm or social influence would affect intention rather than actual usage.

There are a good of number research regarding the relation of social influence or the term social norms toward intention to use in extended TAM. Some research have found that social influence has positive and significant relation toward intention to use (Kumar, Lall, & Mane, 2017; Bhardwaj & Aggarwal, 2016; Yadav, Sharma, & Tarhini, 2016; Mortimer, *et. al.*, 2015; Kazi & Mannan, 2013; Kesharwani & Bisht, 2012). Despite that, few studies that found social influence has insignificantly affect the intention to use (Gumussoy, Kaya, & Ozlu, 2017; Singh & Srivastava, 2016; Mortimer, *et. al.*, 2015)

Kumar, Lall, & Mane, (2017) research about intention of postgraduate student to utilize mobile banking conducted in India to utilize mobile banking among educated youth. In this study social influence exert positive and significant impact on the intention to use mobile banking. The reason for social influence affect intention to use mobile banking can be explained using bandwagon effect, where the tendency to accept other suggestion or follow others who are already using the mobile banking therefore, increasing the person intention to use mobile banking (Kumar, Lall, & Mane, 2017).

A research conducted by Bhardwaj & Aggarwal, (2016) about mobile banking adoption by young generation in India also showed similar results as previous literature regarding the positive effect of social influence toward intention to use mobile banking. With the youth generation, that tendency to connect through their social networks, they have inclination to trust their reference group members and their references can influence them to use or not using particular services or product

Yadav, Sharma, & Tarhini, (2016) in their research that studied the factors that predict the intention to adopt mobile commerce using extended TAM model for the research framework. The results showed social influence does have significant relationship toward customer intention to adopt mobile commerce. The reason is similar with previous literature where young generation may easily inclined to social influence and trying new mobile commerce application due to the convenience offered by social network to share experiences. The youngsters intention to use or adopt a service or product can resulted from influence of their surrounding community voice (Yadav, Sharma, & Tarhini, 2016).

Mortimer, *et. al.*, (2015), investigated determinants that influencing the adoption of mobile banking in a cross culture study between Australia and Thailand. The result of this study showed social influence in Australia does significantly affect intention to utilize mobile banking inline with previous research. However, in Thailand social influence has no significantly effect the intention to utilize mobile banking. This result might be due to the Thailand users feel mobile banking as personal application and less likely to consider intention to use based on other opinion (Mortimer, *et. al.*, 2015).

Kazi & Mannan, (2013) conducted research to identify factors affecting adoption of mobile banking in low income consumers in Pakistan. The results showed that social influence aspect has positive and significant relation toward intention to adopt mobile banking among low-income sector in Pakistan. Based on that result, other previous study on the positive and significant effect from social influence on intention to utilize mobile banking caused by the strong public unity among low income economic sector in Pakistan. This showed that potential adopter of technology influenced from their inner circle like family and friendss (Kazi & Mannan, 2013). Another literature by Kesharwani & Bisht, (2012) exploring the effect of trust and perceived risk on internet banking adoption in India, using extended TAM as theoretical basis. In this study social influence has positive and significant relation into intention to utilize internet banking and this finding aligned with other precedent literature that using social influence in predicting intention to use on TAM framework.

Gumussoy, Kaya, & Ozlu, (2017) conduct study in Turkey about the determinant of mobile banking use using the extended TAM. The results of analysis found that subjective norms as social influence possess insignificant impact toward behavioral intention. The reason for this result is that social influence only make effect on early stage of experience of users who are not familiar and less experience using the technology. Users already has experience in almost the same technology and better knowledge using the mobilephone, they tend to decrease the importance of other suggestions to use such technology. The respondents of the study have at least completed bachelor degree, so it is assumed they had knowledge of mobile banking or other electronic banking services (Gumussoy, Kaya, & Ozlu, 2017).

2.6 Trust propensity

Trust propensity can be defined as representation of a person nature to rely on others in any situation. When a person makes a judgment to a service before he knows it, those with higher trust propensity tend to believe the service can be relied (Mcknight, Cummings, & Chervany, 1998). A person initial trust toward mobile banking is considered as result of propensity trust of users when do not incorporating the experiential elements. There are several previous literatures that incorporating trust on the TAM and the result showed trust has positive and significant relation toward intention to use.

Kumar, Lall, & Mane, (2017) who examined intention to utilize mobile banking among postgraduate students across eight major cities in India. In this study, trust propensity exhibit positive and significant effect toward intention to utilize mobile banking. As the trust propensity possessed strong effect on intention to use mobile banking. Banks are developing their m-banking apps need to constantly improving

and maintain its security as trust propensity incorporate the belief feeling safe when using the m-banking and reliability to deliver the service securely (Kumar, Lall, & Mane, 2017).

Yadav, Sharma, & Tarhini, (2016) assess the factors that predict the intention to adopt m-commerce using extended TAM model. The results showed trust does have a significant relationship toward customer intention to adopt mobile commerce. The argument to support the result is inlined with previous literature whereby security concern become the main aspect that need to be addressed. Any risk caused due tp the usage of the mobile commerce apps that expose customers security and privacy will prevent the intention to adopt the mobile commerce (Yadav, Sharma, & Tarhini, 2016).

Bhardwaj & Aggarwal, (2016) examined mobile banking adoption by youth in India. The trust also exhibits the same result as previous literature which has positive and significant relation toward intention to use mobile banking. When conducting banking service through mobile banking is trustful enough, it will increase the intention to use as the user more confident with the system security and service reliability (Bhardwaj & Aggarwal, 2016)

Similarly study conducted by Gu, Lee, & Suh, (2009) about determinant of intention to utilize mobile banking in Korea. The results showed that trust appears as crucial construct in increasing intention to use mobile banking. With the increase of trust aspect like convince users that security of the mobile banking is high, reduce fraud probability and maintain the service reliability by less downtime will make

users convinced to utilize mobile banking because it can be trusted to conduct banking activities (Gu, Lee, & Suh, 2009).

2.7 Culture

Goularte & Zilber, (2018) defined culture as a set of values and belief that instill on how people think, feel, act and also influence how people behave. While other define culture as the unwritten rules of the social game or formally the collective programming of the mind that differentiate the member from one group to another group (Hofstede, Hofstede, & Minkov, 2010). Collectivism culture defined as societies that has strong cohesive in-groups, which means the ties between individual are tight (Hofstede, Hofstede, & Minkov, 2010). Some literature find culture might impact the adoption of innovation (Mortimer, *et. al.*, 2015; Lee, Trimi, & Kim, 2013) and difference in culture in a country to other country also resulting differences in acceptance of technological innovation (Chemingui & Lallouna, 2013). A few literature that integrating culture factors on acceptance model and the results of the studies exhibit variation. Some results show cultural aspect has significantly affect on the intention to use but others found cultural aspect has no significant relation to the intention to use innovative technology.

In Baptista & Oliviera, (2015) conducting study by integrating the cultural factor as mediator with unified theory of acceptance and use technology as theoretical basis. With 252 data sets from Mozambique banking users, and using structural equation modelling, it showed that some culture aspect like individualism / collectivism play significant influence on mediating behavioral intention to behavioral usage. In line with previous literature, Goularte & Zilber, (2018) research attempt to replicate the work of Baptista & Oliviera (2015) but in Brazil.

The analysis result from 400 responses using partial least square, showed that individualism/collectivism of culture aspect has significant only at 90% confidence level, that considered weak significance.

(Bankole & Bankole, 2017) in their research regarding the effect of cultural dimension on ICT innovation, more specifically on mobile banking. The study take place in South Africa, 220 data sets gathered from students and workers from various fields. Analysis using structural equation modelling with partial least square analysis. The results aligned with previous literature that conducted by other researchers in different nation. It reveals that some culture dimension positively influences the main variable in determining behavioral intention. Like individualism, uncertainty avoidance and masculinity/femininity.

Framework used in previous literature also used by Bankole, Bankole, & Brown, (2011) to explore the factors that influence the adoption of mobile banking. The research was conducted in different countries, in this case in Nigeria. The results from the study showed that some culture aspect like individualism to effort expectancy, high uncertainty avoidance to trust, high uncertainty to effort expectancy, high masculinity to utility expectancy have positive correlation with independent variable. Moreover, power distance has direct positive effect on intention to use.

2.8 Behavioral intention

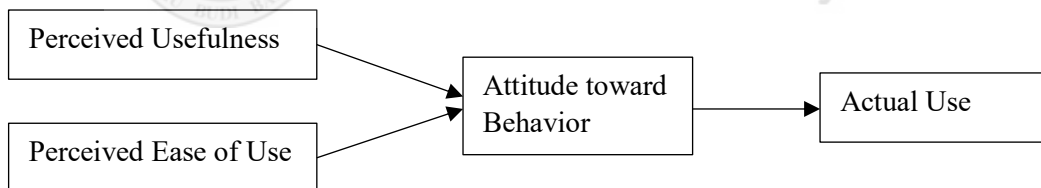
Ajzen (2005) defined behavioral intention as an intention of someone to try performing a certain behavior (Fishbein & Ajzen, 1975). It as the function of both attitude and subjective norm toward behavior and used to predict the actual

behavior. Behavioral intention (BI) is considered as an precedent part of behavior, unlike behavior that seen as a set observable actions, BI formed in intention or plan to react of upcoming behavior (Tarhini, *et. al.*, 2015). Behavioral intention mainly determined an individual's approach to act or react to certain behavior (Fishbein & Ajzen, 1975).

2.9 Underpinning theory

In order to develop a framework for this study, researcher need to elaborate the theories that used as the guideline to conduct this study. In this study the researcher used the extended technology acceptance model (TAM) in order to examine the intention to use mobile banking. Based on various past literature, TAM was one of the widely used acceptance models in examining the innovation or technology adoption (Taherdoost, 2018; Shaikh & Karjaluoto, 2015).

Figure 2.9.1 Proposed technology acceptance model (1989)



Source: Venkatesh & Davis (1989)

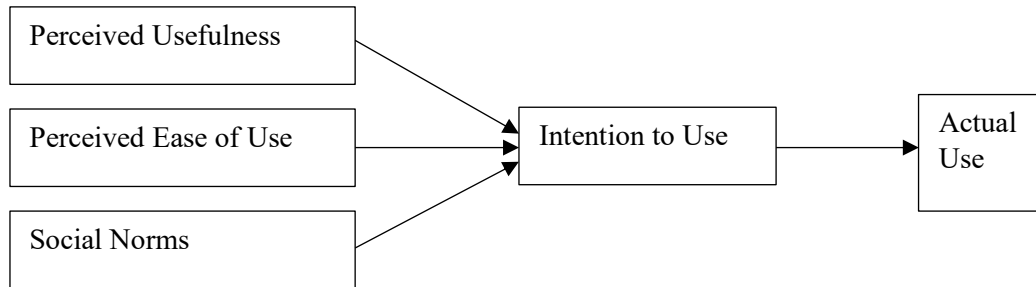
Technology acceptance model (TAM) introduced by Davis, Bagozzi, & Warshaw in 1989 to examine the motivation of user in adopting a particular innovation or system. Technology acceptance model is not purely from ground theory. It is derived from the theory of reasoned action (TRA) that was developed by Fishbein and Ajzen in 1975. TRA concept is more about the behavior, with the assumption that human usually think the decision effect for them before take a decision or action.

TRA has three main constructs which is attitude, subjective norms and behavior intention.

Based on Tarhini, *et. al.*, (2015) attitude aspect is sourced from the individual positive or negative assessment of performing the behavior. This evaluative norm become the previous experience and it really determined on how attitude will effect BI. If experience is good then attitude bring positive effect on behavioral intention if the experience is not good, attitude will effect the behavioral intention the opposite way. Social norm can be described as the influence from society to users that can be inner circle like family and friend or the surrounding community that considered important that may affect user decision should or should not do certain behavior, in the end it also affect on user behavioral intention.

Technology acceptance model experienced evolution for several times. First version was proposed in 1989 elaborate the motivation of users using three determinant which is perceived usefulness, perceived ease of use and attitude toward use. In 1996 final version of technology acceptance model published by Venkatesh and Davis, the difference with 1989 model was the replacing the attitude construct with the behavior intention (to use) as Venkatesh and Davis found that perceived usefulness and perceived ease of use has direct influence onto behavioral intention. In 2000 technology acceptance model evolve again, Venkatesh and Davis integrate subjective norms beside perceived usefulness and perceived ease of use in determining the intention to use and further can determine the actual usage.

Figure 2.9.2 Final technology acceptance model (1996)



Source: Venkatesh & Davis (1996)

In general the technology acceptance model consist of three main dimensions which is perceived usefulness (PU), next is perceived ease of use (PEoU), and social norms (SN) that affect intention to use. Perceived usefulness depicts the degree of person perception regarding the use of a specific system will enhance their performance. PU has shown direct influence on intention to use in previous literature regarding the factor or determinant in intention to adopt a particular innovation or system.

The next one is perceived ease of use, it conveys the perception of user in using particular technology will need less effort to use it which also can be consider easy to use. PEoU variable in early adoption possessed the direct influence into intention to use but it can influence through perceived usefulness. However, in recent literature PEoU also showed mixed result which has significant or insignificant influence toward intention to use. This results explained by Venkatesh & Davis (2000), the PEoU effect on intention to use will decrease if the user feel system is complicated to operate (Tsai, *et. al.*, 2017), the user already familiar to operate such application because experience in using particular platform such internet based or mobilephone based (Yadav, Sharma, & Tarhini, 2016).

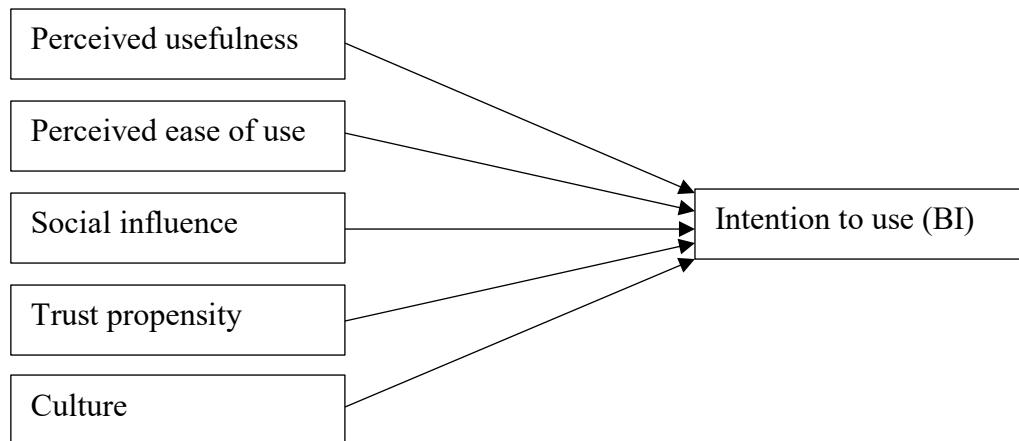
Social influence or subjective norms in technology acceptance model conceive the almost same aspect as subjective norms aspect in theory of reasoned action which represent the influence from other people in shaping a person intention to use or adopt a specific technology. Venkatesh and Davis, (2000) found the social influence or subjective norms has direct and significant influence toward intention to use. It also explain why in the first concept of TAM in 1989 the social norms aspect does not possess significant influence and dropped. The reason is the subjective norms only instill direct effect on intention if the usage context was mandatory while if the usage context is voluntary it might resulted insignificant effect toward intention to use. User that had experience with a specific system overtime relied less to the social information in judging a system (Venkatesh & Davis, 2000). This result also seen in Gumussoy, Kaya, & Ozlu, (2017) and Mortimer, *et. al.*, (2015).

Beyond that, TAM already used in diverse literature, many of them also expanded the TAM model by integrating with other relevant construct in order to cope with the research needs and to broaden the analysis. This version of TAM considered as the extended TAM model and it might improve TAM predictive power which in the first model to be considered low because only explain 40% of variace, while 60% outside the model (Tarhini, *et. al.*, 2015).

2.10 Conceptual framework

Conceptual research framework is the framework proposed by the researcher based on independent variables and the dependent variable used in this study.

Figure 2.10.1 Conceptual framework



Source: Kumar, Lall, & Mane, (2017); & Goularte & Zilber, (2018)

Based on previous studies regarding intention to use of mobile banking, the researcher proposed a conceptual framework in order to examine the relationship and the effect of variables on extended technological acceptance model to the intention to use mobile banking among banking employee of private bank branch in Medan. Based on figure 2.10.1, it showed that extended technological acceptance variables which consisting of perceived usefulness, perceived ease of use, social influence and trust propensity also collectivism culture may affect the intention to use mobile banking facility among banking employee. Based on that framework, researcher proposed the hypothesis to test the relationship between independent and dependent variables.

2.11 Research hypothesis

According to past literatures and underpinning theory discussed on this chapter, the researcher formed hypothesis in order to see the relationship and effect between the independent and dependent variables. In this study five hypothesis developed based on the intention to use mobile banking among banking employee as consumers

using extended technological acceptance model: A case study on private banking branch in Indonesia.

H1: Perceived usefulness has a positive and significant effect toward intention to use mobile banking.

H2: Perceived ease of use has a positive and significant effect toward intention to use mobile banking.

H3: Social influence has a positive and significant effect toward intention to use mobile banking.

H4: Trust propensity has a positive and significant effect toward intention to use mobile banking.

H5: Collectivism culture has a positive and significant effect toward intention to use mobile banking.

2.12 Chapter summary

As a conclusion, this chapter discussed the previous studies and underpinning theory which is related to this study, especially about intention to use mobile banking based on the extended technology acceptance model. Another content in this chapter are the conceptual framework, research hypotheses, also included overview of the Bank Central Asia company where the data are being gathered. The methodology is elaborated in chapter three.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter consisted of the following subtopics which are introduction, population and sampling design, research design, data collection method, research instrument, measurement of scale, data analysis, and the last part is conclusion of this chapter. All these sub topics explained the methodology used on this study.

3.1 Population and sampling design

Determining right population and sample in conducting research play important role. In attempt to answer the research question and later analyses, with the survey method researcher need to determine the appropriate population and sample size. Sekaran (2003) stated that incorrect population target will producing inappropriate data that make the results useless. As the researcher has limited time to conduct the study sampling may help to reduce the number of cases needed (Taherdoost, 2016). In population and sampling design process, researcher will elaborate the target population, sampling size, sampling technique and sampling location based on the need of the research purposes.

3.1.1 Target population

Sekaran (2003) defined population as the entire group of people, events or things of interest that researcher want to assess. Based on this study goal that want to examine the intention to use mobile banking among banking employee in private bank, this research will use Bank Central Asia (BCA) employees as the target population. The researcher chooses the bank employee as target population because several reasons.

First, bank employees are the bank customer itself. The employees need to have one BCA bank account to transferred their monthly salary, with that the employees also have access to the same facility offered as the regular customer. Second, the employees urged by the company to use all the bank account services provided in order to understand the product and be able to demonstrate to the regular customer in understandable way. Also, the employees have more knowledge to the service as they were more exposed to the services materials. Lastly, due to limitation in time to conduct this study, it is more convenience to obtain the data from the employees as consumers because the bank will never reveal the customer data even for the contact only as they were regulated under confidentiality rules.

3.1.2 Sampling size

Sampling size held meaningful effect on research, differences on sampling size may affect the support to the hypothesis of the research. Sekaran (2003) stated that sampling might help researcher to conduct studies more efficient yet still producing reliable results, sampling also reduce the fatigue and time in collecting the data as the researcher no need to gather the data from the entire population. The population size in this study was 647, based on sampling formula and sample table developed by Krejcie and Morgan (1970), with population (N) falls in scale 600-650 the appropriate sample size (S) needed were 234 - 242. To get exact sample size the mathematical formula also given.

$$s = \frac{X^2 NP(1 - P)}{d^2(N - 1) + X^2 P(1 - P)}$$

s = Required sample size

X^2 = The value of chi-square table for 1 degree of freedom at desired confidence level (3.841)

N = The population size

P = The population proportion (assumed to be 0.50 since this would provide maximum sample size)

d = The degree of accuracy expressed as a proportion (0.05)

Based on the formula above:

$$s = \frac{(3.841)(647)(0.5)(1 - 0.5)}{(0.05^2)(647 - 1) + (3.841)(0.5)(1 - 0.5)}$$

$$s = \frac{616.27}{1.61 + 0.96}$$

$$s = 239.33$$

$$s = 239$$

Based on that calculation, showed that the sample size needed was 239. To make sure the sample size fulfilled, the researcher chooses to increase the number of samples up to 350. To gather the data for this study, a total 350 questionnaires have been distributed to the Bank Central Asia branch Medan City employees. From 350 questionnaires only 247 has been completed, thus only 247 data have been accepted to be analyzed.

3.1.3 Sampling technique

This study used convenience sampling because of several reasons. This was done to obtain a sample size efficiently as the time to become constraint in conducting this research. Also, with the confidentiality rules it is not possible to get the sample frame which resulted cannot use the probabilistic sampling. The contacts of the employee were provided from three insiders employee that still working in Bank Central Asia branch Medan City no matter about their echelon position. The researcher contacted personally the employee through messaging application and asked them to participate on the online questionnaire.

3.1.4 Sampling location

Due to limited time to conduct the study, only 350 employees contacted to participated as sample of Bank Central Asia branch Medan City area. The research sample location is focused on the Bank Central Asia branch Medan City area which consist of four branches, North Sumatera.

3.2 Research design

Based on the purpose of this study was to examine the relationship of the extended technology acceptance model variables and culture variable on the intention to use mobile banking among banking employees of Bank Central Asia branch Medan City area, the descriptive research was chosen. Within this study, researcher might be able to examine how the relationship of extended technology acceptance model variables which consist of perceived usefulness, perceived ease of use, social influence, trust propensity and with Hofstede culture aspect affect the intention to use mobile banking on banking employees as consumers.

The data procured in this study were analyzed quantitatively. Quantitative analysis involves data in form of percentage, frequency, averages and may presented using graph, chart, table or statistics to help understanding the meaning and exploring of the data. In addition, quantitative analysis also can produce statistical relationship between variables up to more complex statistical modelling (Saunders, Lewis, & Thornhill, 2009).

3.3 Data collection method

Data collection played important role on every research study, in order conduct the analysis, the data need to be gathered first. There were two way to gather the information, using primary data or secondary data.

3.3.1 Primary data

Primary data is the type of data that collected precisely for a specific research. The data usually collected by the first hand, that's why it's called first hand source and mostly never revealed for the public use. Primary data intended to collect the data directly from the source and procure the data specifically based on specific research problem. In process of gathering the primary data usually the researcher will need to sacrifice time, give more effort and higher financial expenses. In attempt to collect primary data, there were few options to choose which is observation, in-depth or group interviews and questionnaires (Saunders, Lewis, & Thornhill, 2009).

In this research, questionnaires was chosen as the suitable instrument to collect the primary data. Another reason to choose questionnaires for this research because the time constrain and considered the fast way to gather the data required. Saunders, Lewis, & Thornhill, (2009) stated there are two type of questions in questionnaire,

one is close ended question and the other is open ended question. Close ended question is the type of the question that limit the responses from the respondents to choose the already given answer range. Open ended questions are the type of the questions that allow the respondents to answer on their pace. In this study, researcher chosen the close ended questionnaire because it is easier to be analyzed, give accurate data, and involving less effort from the respondent to complete the questionnaire. There is only one section for demographic questions which the researcher chooses to use open ended questions, in order to get more information from responses and involved less effort by respondents to answer them.

3.3.2 Secondary data

Secondary data is the type of data that already collected by other parties or researcher from any sources. In some cases, the advantages of using secondary data compared to primary data is easier to obtain, low cost and can be found from other scholar researches. The secondary data can be in many forms like, government publication, company report, journal articles and others.

In this research secondary data was used in order to find supporting information, like the data from government Otoritas Jasa Keuangan (OJK) and data from company report of Bank Central Asia. Another form of secondary data used in this study was the use of the journal articles that obtained from electronic databases such as ScienceDirect, Emeraldinsight.com, and another Sultanah Bahiyah Library online database.

3.4 Research instruments

Research instrument used for this study was questionnaire. Questionnaire method was selected because it deemed suitable to gather the data needed by the researcher in limited time frame. Sekaran & Bougie (2016) stated that data collection using questionnaires involved less time consuming, less expensive compared the other way like interview and observation. Questionnaires also make efficient data collection mechanism while the researcher knows well what is required and how to measure the variables (Sekaran, 2003).

The process of forming the questionnaire, the researcher needs to know what type of the question will be used. There are two type of question which is close ended question and open-ended question. To determined what question type will be used can be based on the previous literature. In this study, researcher selected to use close ended questionnaire.

3.4.1 Construct measurement

The questionnaires used in this study divided into two section which is section A and section B.

Section A contain the questions related to variable used in this research. Those question were adopted from previous empirical study. All variables question combined in one section in order to make them neat yet still comfortable to see, question number 1 up to 5 representing the variable perceived usefulness, question number 6 up to 9 representing the variable perceived ease of use, question number 10 up to 13 representing the variable social influence, question number 14 up to 17 representing the variable of trust propensity, question number 18 and 19

representing the variable behavioral intention (intention to use) and question number 20 up to 25 representing variable of culture. The questions were in English language but in order to make the respondents comfortable and easier to answer, the researcher conduct back translation process which translating the question into Bahasa Indonesia and then translated back into English language. This process is assisted and reviewed by a lecturer who was fluent in English and Indonesian language. The set of the questionnaire was attached on appendix 1, the table below showed the structure of the questionnaire

Table 3.4.1 Structure of the questionnaire

Section	Variables	Dimensions	Number of Items	Scale
A	Perceived Usefulness	-	5	5 Point Likert Scale
	Perceived Ease of Use	-	4	5 Point Likert Scale
	Social Influence	-	4	5 Point Likert Scale
	Trust Propensity	-	4	5 Point Likert Scale
	Behavioral Intention	-	2	5 Point Likert Scale
	Culture	-	6	5 Point Likert Scale
B	Demographic Information	Gender, Age, Last Education, Year of Work, Echelon Level	5	Nominal

Source: Adopted from Kumar, Lall, & Mane, (2017); & Goularte & Zilber, (2018)

Section B contain questions related to demographic information of the respondents. Researcher chosen to put demographic information in the last part of the questionnaire in order to make the questionnaire seen to on point by the respondent and because the respondents were the banking employee which conveyed that the time is prestigious, they feel the main point more prioritized to see first.

The entire section A response was recorded using 5-point Likert scale. Likert scale was used to examine how strong the respondent agrees or disagree to the statement provided (Sekaran, 2003).

Table 3.4.2 Five-point Likert scale

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

3.4.2 Administration of questionnaire

The questionnaire distributed to the respondents through the internet (internet-mediated questionnaires) and self-administrated by the respondents. The researcher contacted privately the respondent and asked them to participating to answer questionnaire by provided them a link to the online questionnaires, in first page of online questionnaire and when contacting them the researcher explained the purpose of the research and assured them the data kept confidential and not released for the public use.

3.5 Measurement of scale

The measurement scale used on questionnaire for this study based on nominal, ordinal, ratio and Likert scale. Nominal scale was used to indicate subject, groups

or categories which doesn't has order, distance or origin, there is a question used nominal scale which is gender. For ordinal scale, it includes the characteristics of the nominal scale but it has indication of order which means there is differences between each category. In this questionnaire there are few question responses uses ordinal scale which is age group, education level, and echelon level. Ratio scale on the other hand has the nominal, ordinal and interval characteristics which has rank and order attributes, equal distances also absolute for 0 point. In this questionnaire there is one question response using this which is the tenure on the present company. Likert scale was used to examine how strong the respondent agrees or disagree to the statement provided (Sekaran, 2003), likert scale was used to record the responses from respondents regarding the statement that represents the variables used on this study. Also, in order to seek the relationship between the independent variable and dependent variable.

3.6 Reliability analysis

Sekaran (2003) stated reliability analysis is to measure the extent to which the instrument used is without bias (error free) and that ensures the instrument consistency across time, and across various items within the instrument. In brief reliability analysis is measuring the consistency of the instrument to measure the concept and become good fit as the measurement indicator. In attempt to test the reliability of the instrument used, Cronbach alpha was used to measure the intercorrelation of the items in a set of measuring the concept. The indication of the good reliability showed by value of Cronbach alpha closer to 1, the higher the value than 0.6 the better the reliability (Sekaran, 2003). According to Zikmund, Babin,

Carr, & Griffin, (2010) the classification of alpha coefficient for the reliability analysis showed in table below

Table 3.6.1 Cronbach alpha classification

Coefficient Alpha	Description
0.80 – 0.95	Very good reliability
0.70 – 0.80	Good reliability
0.60 – 0.70	Fair reliability
< 0.60	Poor reliability

Source: Zikmund, *et. al.*, (2010)

3.7 Data analysis

Data analysis is one of the important process in research, is an activity from receiving raw data up to accumulated the data and managed it, analyzed the pattern of the data, applied the statistical techniques to saw the statistical results and to test the hypothesis of the research. In data analysis the researcher must process the raw data until the data can be interpreted or at least meaningful. In this research, the researcher used the quantitative analysis in analyzing the data, therefore the suitable tool to analyze is statistical analysis.

3.7.1 Statistical methods

The data acquired on this study were analyzed with the Statistical Package of Social Science (SPSS) software version 25.0. This statistic software helped researcher to process the raw data based on the researcher needs like descriptive analysis consisting frequency analysis and inferential analysis consisting reliability analysis, correlation analysis and multiple regression analysis. Before the data processed on the software. It needs to be decoded and then the software can process it.

3.8 Descriptive analysis

Descriptive analysis is process where researcher presented the data obtained in a simple interpretation yet understandable. The descriptive analysis processed the raw data from the variables and can be presented by table or graphical of description. Usually the descriptive analysis is used for presented the respondents characteristic, which in this research the data for descriptive analysis used section B of the questionnaire which consist gender, age group, last education level, tenure on present company and their echelon level. In descriptive analysis usually provided minimum, maximum, means, standard deviation from the data (Sekaran, 2003).

3.9 Inferential analysis

Zikmund, *et. al.*, (2010) inferential statistics is making inference that from a sample onto population, in other word inferential statistic is used for making generalization from a sample that been observed onto the population of the study. In this study researcher conduct inferential analysis to see if there any relation between the independent variable and dependent variable and also to identify correlation and effect, researcher used the pearson correlation coefficient and multiple regression.

3.9.1 Pearson correlation analysis

Based on Saunders, Lewis, & Thornhill, (2009) Pearson correlation is a statistical test developed to assess the strength of relation between two variables, the coefficient number ranging between negative 1 up to positive 1. The nearer the value of Pearson correlation to the 1 meaning the higher the relation between two variables, negative value means the variable has negative correlation while positive

value means the variable has positive correlation and if the value near 0 it indicated that variables does not have correlation between them.

According Sekaran & Bougie (2016) in interpreting pearson coefficient using Guilford 1973 rule of thumb, the strength of Pearson correlation can be interpreted more specific. if the value of Pearson coefficient more than 0.9 it considered between two variables have very strong relationship, if the value of pearson correlation is fall between 0.7 – 0.9 it considered between two variables have high/strong relationship, another interpretation if the value of Pearson correlation between 0.4 – 0.7 it considered between two variables has moderate relationship and if the value of pearson correlation falls between 0.2 – 0.4 it possess low/weak relationship between two variable and if the value of pearson correlation lower than 0.2 it considered as very low/weak correlation between two variables.

Table 3.9.1 Guilford (1973) rule of thumb

Value of Pearson Correlation Coefficient	Relationship between variables
> 0.9	Very high/strong
0.7 – 0.9	Strong/high
0.4 – 0.7	Moderate
0.2 – 0.4	Weak/low
< 0.2	Very low/weak

Source: Sekaran & Bougie (2016)

3.9.2 Multiple regression

Multiple regression is one of the inferential statistic methods used to find the association between independent and dependent variable. According to Zikmund,

et.al., (2010) regression and correlation are mathematically equivalent, both showed the relationship between variables but the difference is the regression take into account the dependent and independent variable while correlation did not.

According to Sekaran, (2003) multiple regression analysis is conducted to see the simultaneous effect of several independent variable onto dependent variable. Multiple regression also explained the variances created by the set of independent variable in affecting the dependent variable which showed by the value of R^2 . in this study the multiple regression conducted in such where the independent variable consisted of perceived usefulness, perceived ease of use, social influence, trust propensity, culture affecting the dependent variable intention to use mobile banking.

3.10 Chapter summary

This chapter explained the methodology used for this research, which consist of research design, research instruments, sampling technique, data collection procedure, procedure in data analysis which contains of descriptive and inferential analysis. The next chapter discussed about the findings of the study.

CHAPTER FOUR

DATA ANALYSIS AND FINDING

4.0 Introduction

The results of the study are explained in this chapter along with the descriptive statistics, reliability test, and correlation test. The descriptive statistics started the analysis of data. The analysis of the frequency was showed to provide the frequency and percentages readings of the characters of the respondents. The reliability test was measured in order to obtain the validity of the data. Then, correlation test was done to examine the bivariate relationship of the variables. Lastly the multiple regression analysis to show the simultaneous effects from the selected independent variables on dependent variable.

4.1 Background of respondent

The number of staff in total for that specific branch is about 647 staff. Based on the Krejci and Morgan sample table, the sample size should be around 234 up to 242. For specific number of samples after calculating with the formula, the sample needed is 239. With 350 employees contacted, only 247 were responded and filled the questionnaire. That means the response rate was 70%

The overall demographic of respondents can be seen in each table representing gender, age, education level, tenure, and echelon level. All the output is generated by SPSS and for the purpose of the reporting in this chapter, we only use the important information only. The complete one can be referred in the appendix B.

Table 4.1.1 Background of respondents

Gender	Frequency	Percentage (%)
• Male	115	46.6
• Female	132	53.4
Age		
• Below 25	27	10.9
• 26-35	56	22.7
• 36-45	47	19.0
• 46-55	117	47.4
• 56 and above	0	0
Education Level		
• High School	33	13.4
• Diploma	29	11.7
• Undergraduate	169	68.4
• Master	16	6.5
Tenure		
• Below 5 year	42	17
• 5 – 10 year	27	10.9
• 11 – 15 year	31	12.6
• 16 – 20 year	30	12.1
• 21 – 25 year	45	18.2
• 26 – 30 year	61	24.7
• 30 and above	11	4.5
Echelon Level		
• 7	56	22.7
• 6	72	29.1
• 5	72	29.1
• 4	34	13.8
• 3 and above	13	5.3

Table 4.1.1 shows that respondents who took in survey were represented by 115 (46.6%) male and 132 (53.4%) female employees.

From table 4.1.1 it can be inferred that the age group of respondents that took part in the survey. The respondents which in this case are banking employees that also as consumer, their age is more than 45 years old, more specific 117 (47.4%) respondents age between to 46-55 age group, 47 (19%) respondents between to 36-

45 years old and 56 (22.7%) respondents are between to 26-35 age group, the reason for 56 and above become the last option on age group because based on one rules of employment in Bank Central Asia is the age of the regular employee retirement in 55 years old, 50 years is considered in the group of early retirement while executives can get longer which in 60. The youngest in the respondents below 25 age group consisted of 27 people (10.9%).

Table 4.1.1 shows the last education level that completed by the respondents that took part on the data collection. The level of education is based on Indonesian majority education level, which usually start from high school level up to doctoral degree. In this study it can be seen that more than half of the respondents have completed the undergraduate education level as the portion of it reaching 68.4% of total respondents, other education level that respondents completed is diploma 11.7%, high school 13.4% and master degree 6.5%.

Table 4.1.1 shows the range of the tenure of the respondents that participating in data collection. It dominated by the 26 – 30 year of tenure in recent company 24.7% or 61 people, 45 respondents in 21 – 25 year of tenure 18.2%, below 5 year by 42 employee that is 17% proportion from samples, followed by 11 – 15 year, 16 – 20 year, 5 – 10 year which are 31, 30, 27 respectively and last one 30 year with 11 employees.

Table 4.1.1 shows the echelon level of the employee that took part in the study. The echelon level in Bank Central Asia is upward direction, the lowest one as the permanent employee echelon level is seven and the highest is echelon level one, echelon level three and above already considered as the powerful position as this

position filled strategic position and usually this position majorly as head of central branch. In this data collection most of employee that took part is in echelon five and six, consisted 72 employees (29.1%) and the echelon six consisted 72 employees (29.1%) followed by echelon seven, four and three and above as 56 (22.7%), 34 (13.8%) 13 (5.3%) respectively.

4.2 Reliability analysis

Reliability analysis administered to measure the consistency of the instrument to measure the concept and become good fit as the measurement indicator. To test the reliability of the instrument used, Cronbach alpha was used to measure the intercorrelation of the items in a set when measuring a concept. The indication of the good reliability showed by value of Cronbach alpha closer to 1, the higher the value the better the reliability of the instruments (Sekaran, 2003). The threshold according to Zikmund, *et. al.*, (2010) is 0.6.

Table 4.2.1 Reliability test

Variable	Cronbach alpha (Previous study)	Cronbach alpha (current research)
Perceived usefulness (PU)	0.792	0.813
Perceived ease of use (PEoU)	0.857	0.869
Social influence (SI)	0.899	0.711
Trust propensity (TP)	0.839	0.878
Culture (CU)	0.700	0.854
Behavioral intention (BU)	0.802	0.851

Table 4.2.1 shows the result of reliability analysis of instruments used to measure variables of factors that affect behavioral intention. Cronbach alpha result is for

current study measure each variable including the behavioral intention were analyzed with the total sample size of 247 (N=247). Based on literatures (Trivellas, Reklitis, & Platis, 2013) (Nunnally & Bernstein, 1994), the scale of Cronbach alpha above 0.7 is considered adequate to show internal consistencies, while Zikmund, *et. al.*, (2010) considered 0.6 as acceptable and below 0.6 considered poor reliability.

The result of the reliability test for perceived usefulness items consists of five items and when tested it shows Cronbach alpha 0.813 which can be assumed very good internal reliability. The perceived ease of use which contains four items also show very good result for internal reliability test that attained Cronbach alpha 0.869, the social influence also showed the good result of reliability test with four items which got Cronbach alpha 0.711. The trust propensity which consist of four items also got Cronbach alpha 0.878 which means very good reliability. The culture that consisting of six items also showed very good reliability with Cronbach alpha 0.854 and lastly the two items that representing behavioral intention to use got Cronbach alpha 0.851 which also means very good reliability. In summary, all items for each variable has very good and good reliability to measure the concept, the source of the items were adopted from Kumar, Lall, & Mane, (2017); Goularte & Zilber, (2018) studies.

4.3 Pearson correlation analysis

Correlation analysis is a statistical test developed to assess the strength of relation between two variables (Saunders, Lewis, & Thornhill, 2009). While Saunders, Lewis and Thornhill only describe the correlation value in general, if the value of correlation showing near 1 or negative 1 it means the higher the correlation between

two variables, and if the value near 0 it means there is less correlation between two variables. Sekaran & Bougie (2016) more specific in interpreting pearson coefficient by using Guilford 1973 rule of thumb.

Table 4.3.1 Pearson Correlation result

Variable	Behavioral intention to use (IU)	
Perceived usefulness (PU)	0.688**	
Sig. (2-tailed)	0.000	
Perceived ease of use (PEoU)	0.635**	
Sig. (2-tailed)	0.000	
Social influence (SI)	0.236**	
Sig. (2-tailed)	0.000	N= 247
Trust propensity (TP)	0.730**	
Sig. (2-tailed)	0.000	
Culture (CU)	0.197**	
Sig. (2-tailed)	0.002	

Table 4.3.1 showed Pearson correlation of perceived usefulness with behavioral intention to use. From the value of 0.688 means the perceived usefulness has moderate relation toward behavior intention to use and positive value means the perceived usefulness has positive effect on behavioral intention to use which can be inferred, increase in perceived usefulness will increase the behavioral intention to use. The result also showed that perceived usefulness significantly correlates with behavioral intention.

Table 4.3.1 showed Pearson correlation of perceived ease of use with behavioral intention to use. The value of 0.635 means the perceived ease of use has moderate relation toward behavior intention to use and positive value means the perceived ease of use has positive effect on behavioral intention to use which can be assumed, increase in perceived ease of use will increase the behavioral intention to use. The

result also showed that perceived ease of use significantly correlates with behavioral intention.

Table 4.3.1 exhibited Pearson correlation of social influence with behavioral intention to use. The value of 0.236 means the social influence has low relation toward behavior intention to use and positive value means the social influence has positive effect on behavioral intention to use which can be assumed, increase in social influence will increase the behavioral intention to use. The result also exerted social influence significantly correlates with behavioral intention.

Table 4.3.1 exhibited Pearson correlation of trust propensity toward behavioral intention to use. The figure of 0.730 means the trust propensity has high relation toward behavior intention to use and positive value means the trust propensity has positive effect on behavioral intention to use which can be deduced, increase in trust propensity will increase the behavioral intention to use. Result also pointed that trust propensity significantly correlates with behavioral intention to use.

Table 4.3.1 showed Pearson correlation of culture toward behavioral intention to use. The figure of 0.197 means the culture has very low relation toward behavior intention to use and positive value means the individualism/collectivism culture has positive effect on intention to use which can be interpreted increase in culture will increase the behavioral intention to use. The result also showed that culture significantly correlates with behavioral intention to use.

4.4 Multiple regression analysis

Regression analysis is used to examine the effect of perceived usefulness, perceived ease of use, social influence, trust propensity and culture variable simultaneously

to explain the behavioral intention to use mobile banking. The results of the regression analysis between these variables toward behavioral intention to use mobile banking is presented in table 4.4.1 below. Based on the results from Table 4.4.1 describing the details results of multiple regression, the value of r-square is 0.638 or 63.8% which means perceived usefulness, perceived ease of use, social influence, trust propensity and culture manage to explain 63.8% variance of behavioral intention to use mobile banking and the rest of variance is assessed by other variables the outside of the model.

Table 4.4.1 Multiple regression result

Variable	Beta	Sig.
Constant	0.762	0.001
Perceived usefulness (PU)	0.429	0.000
Perceived ease of use (PEoU)	0.096	0.056
Social influence (SI)	0.019	0.315
Trust propensity (TP)	0.331	0.000
Culture (CU)	0.021	0.301
$R^2 = 0.638$, $F = 84.9$, $\text{Sig.} = 0.000$		

4.5 Hypothesis testing

Hypothesis 1 (H1): *Perceived usefulness has a positive and significant effect toward intention to use mobile banking*

Based on the Pearson correlation results in Table 4.3.1 and multiple regression analysis results Table 4.4.1, perceived usefulness has a positive relationship and positive effect toward intention to use mobile banking. The level of significance attained by perceived usefulness is very significant at $p = 0.000$. It implied that on the confidence level 95% perceived usefulness had significant effect toward intention to use mobile banking and the beta coefficient value 0.429 showed that the

perceived usefulness had positive effect toward intention to use mobile banking which means the increase in perceived usefulness will resulted increase in intention to use mobile banking. Based on this result, hypothesis one (H1) was supported.

Hypothesis 2 (H2): *Perceived ease of use has a positive and significant effect toward intention to use mobile banking*

Based on the Pearson correlation Table 4.3.1 and multiple regression analysis result Table 4.4.1, perceived ease of use has a positive relationship and positive effect toward intention to use mobile banking. The significance attained by perceived ease of use was 0.056. It implied that in 95% confidence level, perceived ease of use had insignificant effect toward intention to use mobile banking and the beta coefficient value 0.096 showed that the perceived ease of use had positive effect toward intention to use mobile banking which means the increase in perceived ease of use will resulted increase in intention to use mobile banking. Based on that hypothesis two (H2) not supported.

Hypothesis 3 (H3): *Social influence has a positive and significant effect toward intention to use mobile banking*

Based on the Pearson correlation Table 4.3.1 and multiple regression analysis result Table 4.4.1, social influence has a positive relationship and positive effect toward intention to use mobile banking. The significance attained by social influence was 0.315. It implied that in 95% confidence level, social influence had insignificant relationship toward intention to use mobile banking and the beta coefficient value 0.019 showed that the social influence had positive effect toward intention to use mobile banking which means the increase in social influence will resulted increase

in intention to use mobile banking. Based on that hypothesis three (H3) could not be supported.

Hypothesis 4 (H4): *Trust propensity has a positive and significant effect toward intention to use mobile banking*

Based on the Pearson correlation Table 4.3.1 and multiple regression analysis result Table 4.4.1, trust propensity has a positive relationship and positive effect toward intention to use mobile banking. The level of significance attained by trust propensity is very significant at $p = 0.000$. It implied that in 95% confidence level, trust propensity had significant effect toward intention to use mobile banking and the beta coefficient value 0.331 showed that the trust propensity had positive effect toward intention to use mobile banking which means the increase in trust propensity will resulted increase in intention to use mobile banking. Based on that hypothesis four (H4) was supported.

Hypothesis 5 (H5): *Collectivism culture has a positive and significant effect toward intention to use mobile banking*

Based on the Pearson correlation Table 4.3.1 and multiple regression analysis result Table 4.4.1, culture has a positive relationship and positive effect toward intention to use mobile banking. The significance attained by social influence was 0.301. It implied that in 95% confidence level, culture had insignificant effect toward intention to use mobile banking and the beta coefficient value positive 0.021 showed that the trust propensity had positive effect toward intention to use mobile banking which means the increase in culture will resulted increase in intention to use mobile banking. Based on that hypothesis five (H5) could not be supported.

4.6 Summary of hypothesis testing result

Table 4.6.1 Summary of hypothesis based on regression analysis

Variable	Hypothesis	Result
Perceived usefulness	H1: <i>Perceived usefulness has a positive and significant effect toward intention to use mobile banking</i>	Supported
Perceived ease of use	H2: <i>Perceived ease of use has a positive and significant effect toward intention to use mobile banking</i>	Not supported
Social influence	H3: <i>Social influence has a positive and significant effect toward intention to use mobile banking</i>	Not supported
Trust propensity	H4: <i>Trust propensity has a positive and significant effect toward intention to use mobile banking</i>	Supported
Culture	H5: <i>Collectivism culture has a positive and significant effect toward intention to use mobile banking</i>	Not supported

Refers to the finding on this chapter, based on the Pearson correlation and multiple regression, can be concluded that:

- Based on Pearson correlation, all variables (perceived usefulness, perceived ease of use, social influence, trust propensity and culture) has positive and significant relationship toward behavioral intention to use mobile banking. The strength of the correlation varies between variable, from the strongest to the weakest start with trust propensity 0.730, perceived usefulness 0.688, perceived ease of use 0.635, social influence 0.236, and culture 0.197.
- Based on the multiple regression results, the perceived usefulness and trust propensity have significant and positive effect on the intention to use mobile banking, and the results are aligned with the previous literature that finds the increase in perceived usefulness and trust propensity will increase the behavioral intention to use mobile banking. While perceived ease of use, social influence and collectivism culture have insignificant effect toward intention to use mobile banking.
- The hypothesis testing summary are: there is a positive relationship between perceived usefulness, perceived ease of use, social influence, trust propensity and individualism/collectivism culture toward intention to use mobile banking. However only perceived usefulness and trust propensity that significantly affect the intention to use mobile banking, while perceived ease of use, social influence and collectivism culture do not significantly affect the intention to use mobile banking.

CHAPTER FIVE

DISCUSSION AND CONCLUSION

5.0 Introduction

The discussion in current chapter aligned on the findings that showed on previous chapter. The variables which consist perceived usefulness, perceived ease of use, social influence, trust propensity and culture that had been analyzed and explained in this section regarding their relation and effect toward intention to use mobile banking. On this chapter explained the results from the data analysis and finally the limitation of this study and the recommendation for future studies.

5.1 Discussion

The primary objective of this study was to examine the relationship and the effect of independent variables which consist of perceived usefulness, perceived ease of use, social influence, trust propensity and collectivism culture toward the intention to use mobile banking. This study used inferential analysis to analyzed the data gathered in order to make inference from samples involved regarding the factor that might sway respondent intention to use mobile banking. Based on inferential results that showed by Table 4.3.1 and Table 4.4.1 also, the summary of hypothesis testing based on Table 4.6.1.

Objective one: To examine the relation and effect between independent variables (perceived usefulness, perceived ease of use, trust and social influence) with the intention to use mobile banking facility among banking employee as consumer.

Objective two: To examine the relation and effect between collectivism culture on intention to use mobile banking facility among banking employee as consumer.

To examine the relation between the extended TAM variables which is perceived usefulness, perceived ease of use, trust and social influence toward intention to use mobile banking, the researcher used the Pearson correlation analysis. Based on Table 4.3.1 and Table 4.4.1, perceived usefulness variable exhibit significant, moderate correlation on intention to use mobile banking and in multiple regression the result was positive and significant effect on the intention to use mobile banking. This results was in line with previous literature. Perceived usefulness has significant moderate relationship with intention to use based on multiple regression results has positive and significant impact on intention to adopt mobile banking. Using mobile services may provide customers with more benefit like higher degree of mobility using the service also more convenience and efficient (Alalwan, *et. al.*, 2018), attracted to the technologies that perceived useful and suited to consumer needs (Siyal, Ding, & Siyal, 2018), ability to access the banking service without time and place restriction (Alalwan, *et. al.*, 2016). The reason perceived usefulness influence positive effect toward intention to use mobile banking by banking employee as consumers because with the emerge of the smarphone usage and some of them has a task to describing how to use the mobile banking facility or troubleshooting if there is a complain from customer they are more familiarized and feel more useful in helping their task.

On the other hand, perceived ease of use also exhibits significant, moderate correlation toward intention to use mobile banking and from multiple regression analysis results has positive but insignificant effect toward intention to use mobile banking. The perceived ease of use results also aligned with the past literature which possess the positive effect on intention to use mobile banking because the easier the

application to use by the consumer, the higher their intention to use it (Kumar, Lall, & Mane, 2017). But in this study perceived ease of use exhibit insignificant effect toward intention to use mobile banking, the rationale behind this result can come from various issues which is the difficult to operate (complexity) that made the user need more effort to understand (Tsai, Wang, Yan, & Chang, 2017), or the effect of the widespread usage of the smartphone made the user ignore this aspect as they are easily adapting in using an application in their mobile phone (Yadav, Sharma, & Tarhini, 2016), this also supported by Venkatesh & Davis, (2000) the effect of perceived ease of use might diminish in some cases because some of aspect ease of use also embedded through perceived usefulness and that's why perceived usefulness exhibit stronger effect on intention to use mobile banking. In real world with the growing number of cashless societies in Indonesia, it also encourages bank employee (as user) to utilize the mobile banking facility to support daily life needs such as top up their e-wallet for online taxi or online food delivery or other needs.

Social influence or in other literature mentioned as social norms, in the Pearson correlation finding section showed positive, significant, low correlation on intention to use mobile banking. The results of multiple regression were positive but insignificant effect toward intention to use mobile banking. This result also aligned with the Venkatesh & Davis, (2000) research when integrated social norms that influencing the intention to use a particular technology. In that research it was found that the effect of social influence in intention to use particular system will diminish if the context of the intention to use is voluntary. Gumussoy, Kaya, & Ozlu, (2017) found that social influence also does not have any significant effect toward intention to use the reason for that result because the social influence only make effect in

early stage of the technology adoption when the user already had experience to support usage. The users will decrease dependence toward other suggestions at later stage. Mortimer, *et. al.*, (2015) also found that social influence does not has any significant effect onto intention to use mobile banking in Thailand. Users in Thailand might feel the mobile banking is a personal application and users to decide to use it or not are based on user's need. The environment of banking employees that embedded do not easily trust without checking tenets might affect their intention to use decision. They need to discover by themselves the mobile banking and feel the benefit for themselves. It is inline with their needs and expectation, their intention to use will be higher naturally and not because the influence from others.

Trust propensity has the strongest correlation result compared to the others, which is significant, high correlation with intention to use. The results of multiple regression showed positive and significant impact on intention to adopt mobile banking. The result was aligned with previous studies, Yadav, Sharma, & Tarhini, (2016) in their research found that trust played positive and significant effect on intention to use mobile commerce. The reason for that is users who are in doubt regarding their data security and privacy in using such application. If the providers of the app can showed they can be trusted to keep the users sensitive data, the users intention to use will increase as their doubt reduced. Kumar, Lall, & Mane, (2017) also found the same results where trust propensity has positive and significant effect toward intention to use mobile banking. In mobile banking, the security concern is more critical because it involved the banking accounts of the users, any doubt of the security and reliability of the system to conduct banking services might inhibit

the intention to use mobile banking. The banks campaigns must continuously improve and using the most secure system in order to secure user's data and reduce breakdown in delivering services will increase in intention to use mobile banking.

The culture aspect in this study only assessing the collectivism dimension regarding their effect on the intention to use mobile banking. Based on the correlation analysis, the individualism/collectivism culture aspect is positive, significant, and very low correlation toward intention to use mobile banking. Multiple regression results exhibit positive and insignificant effect on intention to use mobile banking. This result is almost the same with Goularte & Zilber, (2018) research that attempt to replicating Baptista & Oliviera, (2015) research by integrating culture factor in determining the intention to use mobile banking. The results show from five cultural aspect, none of them has significantly affect the intention to use mobile banking in Mozambique. Collectivist cultural aspect is only significant if using lower confidence level. Hence at 95% all five cultural aspect showed insignificant effect. Research by Yoon, (2009) showed that individualist/collectivist aspect has no significant effect toward intention to use. Moreover the collectivist that characterized by societies who emphasize strong relationship and interdependence and regard trust as the important condition in accepting someone therefore, might inhibit intention to use mobile banking. Collectivist culture tend not to easily trust in accepting a particular technology which might acted as an inhibitor in increasing intention to use mobile banking (Yoon, 2009).

The overall results, the Pearson correlation analysis showed each of variable has significant correlation with intention to use mobile banking but with different

correlation coefficient effect ranging from highest at 0.730 to lowest at 0.197. Result from multiple regression analysis showed only perceived usefulness and trust propensity that have significant effect toward the intention to use mobile banking. The model r-square was 0.638 and sig. 0.000 which means the model used manage to explain 63.8% variance of behavioral intention to use mobile banking and the rest of variance is explained by other variables the outside of the model and significance means the chosen model was suitable to measure the behavioral intention to use mobile banking.

5.2 Limitation for the study

This study is far from perfect, there are some limitations in conducting this research. First limitation in this study was the usage of the extended technology acceptance model that incorporating the trust propensity and partial culture aspect. The researcher choose to use technology acceptance model (TAM) because it is already widely used for studies that examine the factors of acceptance of particular technology, resulting the high number of past literature (Shaikh & Karjaluoto, 2015) TAM is also regarded as the robust, parsimonious model for predicting the user's innovation acceptance behavior (Munoz-Leiva, *et. al.*, 2017). Researcher used perceived usefulness perceived ease of use, social influence, trust propensity and individualism/collectivism culture as factors to explain the intention to use mobile banking among banking employee as consumer. With only 30% portion of the bank transactions that used mobile banking as the delivery channel after its introduced 14 years ago the need to explore what factors that influence the intention to use mobile banking on banking users is paramount.

Second limitation regarding the respondents. This research used bank employees as the respondents rather than random bank customers, because of the law barrier in getting customers contacts from bank and the only way able to deliver questionnaire manually by meeting the bank customers. With manual method of distributing the questionnaires it will take longer time to collect the data, and more expenses incurred especially if the number of samples needed is big. Banking employee also act as bank's customer as they also use the bank products and services, they must have the bank account to receive their salary which means they also the same as a regular customer but the difference they worked there.

While from the faculty discretion for gathering data approximately six weeks, to catch up with timeline researcher choose to used bank employees as respondents and set specific coverage to a region in order to get the required sample size. The internet-based questionnaire for fast distribution of questionnaire was used. The sampling method research used was convenience sampling method in order to speed up data collection but the result of the research is less generalizable to entire bank customers, the results only represent for the population chosen.

Third limitation was about the period to complete the study. With the implementation of tri-semester, the time available to conduct research also becomes shorter to approximately only less than 4 months. More specific only 14 weeks available from start by getting supervisor until the viva process and correction period. That's why some aspect need to be sacrificed like only used individualism/collectivism culture aspect instead used all the other Hofstede culture aspect.

Fourth limitation in this study was the statistical analysis used to analyze the data. Researcher only used Pearson correlation analysis and multiple regression analysis. While past literature has some used structural equation modelling (SEM), partial least square (PLS), but there is some past literature that also used the same method as researcher used in this study which is Pearson correlation analysis and multiple regression analysis. The software to analyze the data used SPSS while some used Smart-PLS and AMOS to analyze the data. As researcher used Pearson correlation analysis and multiple regression analysis the suitable software to process the data will be SPSS because it could help to provide answers to research questions.

5.3 Recommendation for future research

With this study only covering banking employees of specific private banks in Medan city area, for future study it might be done by involving more banks branch starting by covering North Sumatera, up to entire Sumatera branch or on national scale covering branches from Aceh up to Papua.

With a larger scope of population, the samples size could also increase and that might provide better findings and interesting result. Also, need to change of sampling technique using more representative method like purposive sampling, quota sampling or better using probability sampling if can get the sampling frame of the employee, so the result of the research can be generalized.

In future it's also suggested the research not only limited to intention to use but up to actual usage of mobile banking to get better insight on the effect of the extended technology acceptance model variables to the actual usage of mobile banking and intention to use mobile banking acted as the mediating variable.

5.4 Conclusion

The mobile banking technology in Indonesia is still in a growing stage, even it is already available to the public since 2004. The adoption of mobile banking is still far from being fully adopted. Based on the latest report from one private bank that become pioneer in introducing mobile banking in Indonesia their mobile banking channel adoption and usage is showing increasing trend from 2004 until 2018 but the usage by customer to conduct transaction is still below 40% even after 14-year continuous update and revamp in features offered. Therefore, there is a need to examine the factors that affecting the intention to use mobile banking.

Technology acceptance model to assess the factors that influence intention to use a particular technology has been widely used in studies. Many researchers also integrated other factors based on their need with TAM model which later become extended technology acceptance model. The results in this research showed that perceived usefulness and trust propensity are the strongest factors in influencing intention to use mobile banking among banking employees, while perceived ease of use, social influence and individualism/collectivism culture aspect no influence toward intention to use mobile banking among banking employees in this study. The combination of extended technology acceptance model with culture aspect might provide insight to understand the intention to use mobile banking among banking employee.

Based on cross reference the correlation and multiple regression results it showed that banking employees in a specific private bank in Medan, Indonesia have been influent by perceived usefulness and trust propensity aspect in their intention to use

mobile banking. Other aspect such as perceived ease of use, social influence and collectivism culture did not provide evidence to support in intention to use mobile banking with insignificant effects toward it. The implication of this is that banks need to maintain good service together with improving the usefulness of the mobile banking services to attract more users, and constantly maintain the users trust by delivering reliable yet secure system for users because this will affect the trust propensity by existing mobile banking customers and prospective banking customers.



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Appendix A



Dear Respondent,

I am Ilham Rusdiansyah, student of Master of Science (Management) in Universiti Utara Malaysia. I hereby designed questionnaire to study the intention of banking employee to use mobile banking facility, evidence from a private bank branch in Medan, North Sumatera.

The Questionnaire is divided into two parts which is section 1, section 2. I would be thankful and fully appreciate if you could answer all the question carefully. All the answer and data given here will be very confidential and only used for the educational purposes.

Thank you for your corporation and time spared, it is very appreciated.

Sincerely,

Ilham Rusdiansyah

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Section 1

Mobile Banking

In this section the purpose of this questionnaire is to give you a chance to tell some aspect of **intention to use mobile banking facility**, what things you are **agreed** and what things you are **disagree** with. On the basis of the answer we hope to get better understanding of the **intention to use mobile banking among banking employee**.

On next page you will find statement about some aspect of **intention to use mobile banking**.

- Please read each statement carefully
- Decide **how agree you feel about the aspect of intention to use mobile banking** described by each statement

Keep the statement in mind:

- ✓ If you feel that statement matches you **completely** tick the box 5 which is **“Strongly Agree”**
 - ✓ If you feel that statement matches you **as it is or some of it** tick the box 4 which is **“Agree”**
 - ✓ If you **cannot make up your mind** whether or not the aspect matches your preference tick the box 3 which is **“Neutral”**
 - ✓ If you feel that statement **not in line with what you expected** tick the box 2 which is **“Disagree”**
 - ✓ If you feel that statement **very not in line with what you expected** tick the box 1 which is **“Strongly Disagree”**
- **Please answer all statements** to make sure we get whole image of your agreement/disagreement with aspects of intention to use mobile banking.
 - **Be frank and honest** while answering the statements, this will not affect your employment status, and the data is kept strictly confidential.

Guide:

Ask yourself: How am I with this aspect of mobile banking?

Strongly Agree means I'm strongly agree with this aspect of mobile banking

Agree means I'm agree with this aspect of mobile banking

Neutral means I can't decide whether agree or not with this aspect of mobile banking

Disagree means I'm disagree with this aspect of mobile banking

Strongly Disagree means I'm strongly disagree with this aspect of mobile banking

Please tick the appropriate box based on your choice

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
		1	2	3	4	5
1	Mobile banking would save my travelling expenses to the bank					
2	Mobile banking would be useful as it would save my time					
3	Mobile banking would be useful because of its convenience to use anywhere					
4	Using mobile banking would improve my productivity					
5	Using mobile banking would improve my effectiveness in utilizing banking services					
6	Learning to use mobile banking would be easy for me					
7	Mobile banking provides me with easy user interface					
8	It would be easy for me to become skillful at using mobile banking					
9	Mobile banking would be flexible to interact with					
10	I would show/tell other that I use mobile banking					
11	I would use mobile banking if other uses it					
12	I would like to discuss the features of mobile banking with other					
13	I would use mobile banking if people who are important to me would try convince me					
14	My privacy related to mobile banking would not be compromised					
15	My mobile banking transaction would be secure					
16	My trust level on mobile banking would be the same as banking in person through a branch					
17	While using mobile banking I think my information would be kept confidential					

18	I intend to use mobile banking					
19	I predict that I shall use mobile banking					
20	Being accepted as a member of a group is more important than having autonomy and independence					
21	Being accepted as a member of a group is more important than being independent					
22	Group success is more important than individual success					
23	Being loyal to a group is more important than individual gain					
24	Individual rewards are not as important as group welfare					
25	Its more important for a manager to encourage loyalty and a sense of duty in subordinates than it is to encourage individual initiatives					



Section 2

Background Profile

Please tick (☐) on appropriate response

1. Please indicate your gender

☐ Male

☐ Female

2. Please indicate your age

☐ Below 25 Years

☐ 46 to 55 Years

☐ 26 to 35 Years

☐ 56 Years and above

☐ 36 to 45 Years

3. Please Specify your last educational level

☐ High School

☐ Undergraduate (S1)

☐ Diploma (D1/D2/D3/D4)

☐ Master (S2)

4. Please indicate your Years of working in current company

☐ Year

5. Please indicate your echelon level:

☐ 7

☐ 4

☐ 6

☐ 3 and Above

☐ 5



FINISHED

THANK YOU VERY MUCH FOR THE RESPONSE AND ATTENTION GIVEN

Bahasa Indonesia Version

Petunjuk:

Tanyakan pada diri anda: bagaimana menurut saya aspek intensi penggunaan mobile banking ini?

Sangat Setuju berarti saya sangat setuju pada aspek intensi penggunaan mobile banking ini

Setuju berarti saya setuju pada aspek intensi penggunaan mobile banking ini

Netral berarti saya tidak yakin apakah setuju atau tidak setuju pada aspek intensi penggunaan mobile banking ini

Tidak Setuju berarti saya tidak setuju pada aspek intensi penggunaan mobile banking ini

Sangat Tidak Setuju berarti saya sangat tidak setuju pada aspek intensi penggunaan mobile banking ini

Tolong untuk mencentang pada kotak sesuai dengan pilihan anda

		Sangat Tidak Setuju	Tidak Setuju	Netral	Setuju	Sangat Setuju
		1	2	3	4	5
1	Mobile banking dapat menghemat biaya pergi ke bank					
2	Mobile banking bermanfaat karena menghemat waktu saya					
3	Mobile banking bermanfaat karena mudah diakses dimana saja					
4	Menggunakan mobile banking dapat meningkatkan produktivitas saya					
5	Menggunakan mobile banking dapat mengefektifkan penggunaan fasilitas dari perbankan					
6	Saya dengan mudah mempelajari cara untuk menggunakan mobile banking					
7	Mobile banking menyediakan antarmuka/interface yang mudah dimengerti					
8	Saya dapat dengan mudah menguasai penggunaan mobile banking					
9	Mobile banking menyediakan interaksi yang cukup fleksibel					
10	Saya suka memberitahu/menunjukkan pada orang lain bahwa saya menggunakan mobile banking					
11	Saya akan menggunakan mobile banking jika orang lain menggunakannya					
12	Saya akan berdiskusi tentang fitur yang ada pada mobile banking dengan orang lain					

13	Saya akan menggunakan mobile banking apabila orang terdekat saya meyakinkan saya untuk menggunakannya					
14	Penggunaan mobile banking tidak mengganggu privacy saya					
15	Keamanan transaksi mobile banking saya akan selalu terjamin					
16	Kepercayaan saya pada mobile banking sama dengan jika saya pergi langsung ke bank					
17	Ketika saya menggunakan mobile banking, saya rasa kerahasiaan informasi tetap terjamin					
18	Saya berniat untuk menggunakan mobile banking					
19	Saya mengira bahwa sudah seharusnya saya menggunakan mobile banking					
20	Diterima oleh suatu kelompok lebih penting daripada memiliki kemandirian dan kebebasan individual					
21	Diterima pada suatu kelompok lebih penting daripada kebebasan diri saya					
22	Keberhasilan secara berkelompok lebih penting daripada keberhasilan individu					
23	Loyalitas pada suatu kelompok lebih penting daripada kepentingan secara individu					
24	Kepentingan individu tidak sepenting kemaslahatan bersama					
25	Bagi seorang atasan, dorongan kesetiaan dan rasa tanggung jawab bawahan lebih penting daripada dorongan inisiatif individu					

Section 2

Background Profile

Please tick (☐) on appropriate response

1. Gender:

☐ Laki-laki

☐ Perempuan

2. Umur:

☐ Dibawah 25 Tahun

☐ 46 - 55 Tahun

☐ 26 - 35 Tahun

☐ 56 Tahun keatas

☐ 36 - 45 Tahun

3. Pendidikan terakhir:

☐ Sekolah Menengah Atas

☐ Sarjana (S1)

☐ Diploma (D1/D2/D3/D4)

☐ Pasca sarjana (S2)

4. Masa kerja di perusahaan ini

☐ Tahun

5. Posisi eselon terakhir:

☐ 7

☐ 4

☐ 6

☐ 3 dan keatas

☐ 5

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Appendix B

Descriptive statistics, Reliability, Correlation and Regression results

gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Perempuan	132	53.4	53.4	53.4
	Laki-laki	115	46.6	46.6	100.0
	Total	247	100.0	100.0	

umur

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Dibawah 25 Tahun	27	10.9	10.9	10.9
	26 - 35 Tahun	56	22.7	22.7	33.6
	36 - 45 Tahun	47	19.0	19.0	52.6
	46 - 55 Tahun	117	47.4	47.4	100.0
	Total	247	100.0	100.0	

pendidikan

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SMA Sederajat	33	13.4	13.4	13.4
	Diploma (D1~D4)	29	11.7	11.7	25.1
	Sarjana (S1)	169	68.4	68.4	93.5
	Pascasarjana (S2)	16	6.5	6.5	100.0
	Total	247	100.0	100.0	

level eselon

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3 dan di atasnya	13	5.3	5.3	5.3
	4	34	13.8	13.8	19.0
	5	72	29.1	29.1	48.2
	6	72	29.1	29.1	77.3
	7	56	22.7	22.7	100.0
	Total	247	100.0	100.0	

masa bekerja

		Frequency	Percent
Valid	1	4	1.6
	2	16	6.5
	3	20	8.1
	4	2	.8
	5	4	1.6
	6	2	.8
	7	1	.4
	8	5	2.0
	9	6	2.4
	10	9	3.6
	11	7	2.8
	12	6	2.4
	13	7	2.8
	14	5	2.0
	15	6	2.4
	16	1	.4

17	2	.8
18	3	1.2
19	8	3.2
20	16	6.5
21	5	2.0
22	19	7.7
23	6	2.4
24	6	2.4
25	9	3.6
26	5	2.0
27	8	3.2
28	20	8.1
29	12	4.9
30	16	6.5
31	6	2.4
32	3	1.2
33	1	.4
34	1	.4
Total	247	100.0

Reliability

PU

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.813	.844	5

SI

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.711	.698	4

PEoU

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.869	.877	4

TP

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.878	.878	4

CU

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.854	.854	6

BI

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.851	.851	2

Correlation

Correlations

		PU	PEoU	SI	TP	CU	BI
PU	Pearson Correlation	1	.636**	.185**	.599**	.200**	.688**
	Sig. (2-tailed)		.000	.004	.000	.002	.000
	N	247	247	247	247	247	247
PEoU	Pearson Correlation	.636**	1	.225**	.680**	.269**	.635**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	247	247	247	247	247	247
SI	Pearson Correlation	.185**	.225**	1	.269**	.377**	.236**
	Sig. (2-tailed)	.004	.000		.000	.000	.000
	N	247	247	247	247	247	247
TP	Pearson Correlation	.599**	.680**	.269**	1	.281**	.730**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	247	247	247	247	247	247
CU	Pearson Correlation	.200**	.269**	.377**	.281**	1	.197**
	Sig. (2-tailed)	.002	.000	.000	.000		.002
	N	247	247	247	247	247	247
BI	Pearson Correlation	.688**	.635**	.236**	.730**	.197**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.002	
	N	247	247	247	247	247	247

Multiple regression

Model Summary^b

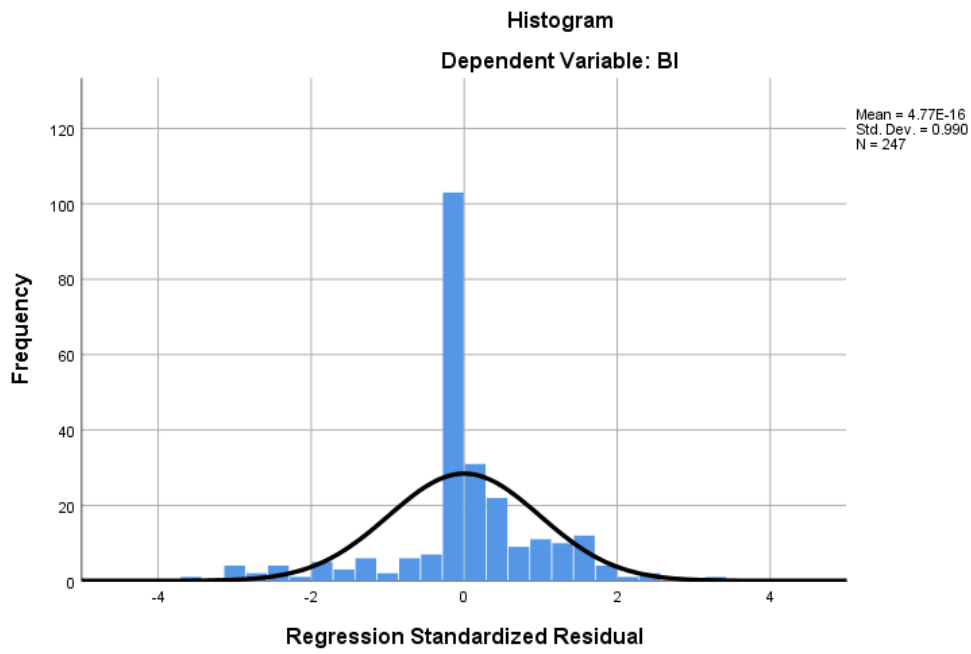
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.799 ^a	.638	.631	.23958

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.394	5	4.879	84.996	.000 ^b
	Residual	13.833	241	.057		
	Total	38.227	246			

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	.762	.232		3.284	.001
	PU	.429	.064	.352	6.692	.000
	PEoU	.096	.050	.111	1.921	.056
	SI	.019	.019	.043	1.007	.315
	TP	.331	.042	.445	7.919	.000
	CU	.021	.020	.045	1.038	.301



Appendix C

Hypothesis statement		Method of analysis	Results
H1	Perceived usefulness has a positive and significant effect toward intention to use mobile banking	Pearson correlation	Moderate
		Multiple regression	Positive and significant effect, H1 supported
H2	Perceived ease of use has a positive and significant effect toward intention to use mobile banking	Pearson correlation	Moderate
		Multiple regression	Positive but not significant effect, H2 not supported
H3	Social influence has a positive and significant effect toward intention to use mobile banking	Pearson correlation	Low
		Multiple regression	Positive but not significant effect, H3 not supported
H4	Trust propensity has a positive and significant effect toward intention to use mobile banking	Pearson correlation	High
		Multiple regression	Positive and significant effect, H4 supported
H5	Collectivism culture has a positive and significant effect toward intention to use mobile banking	Pearson correlation	Very low
		Multiple regression	Positive but not significant effect, H5 not supported